

# Mississippi

## **Environmental Quality Incentives Program (EQIP) Manual**

**FY 2002  
Program Year**



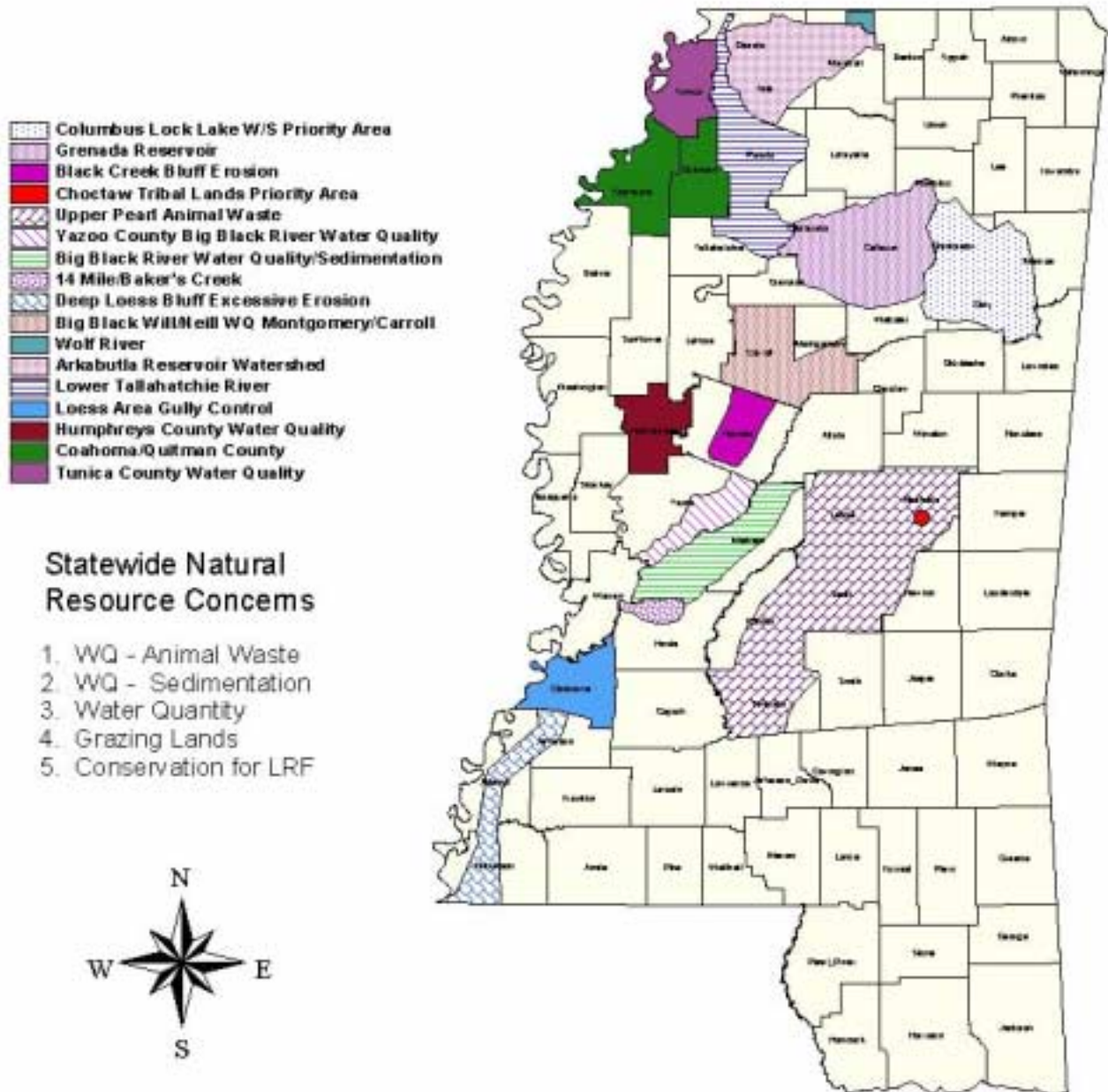
# MISSISSIPPI EQIP MANUAL

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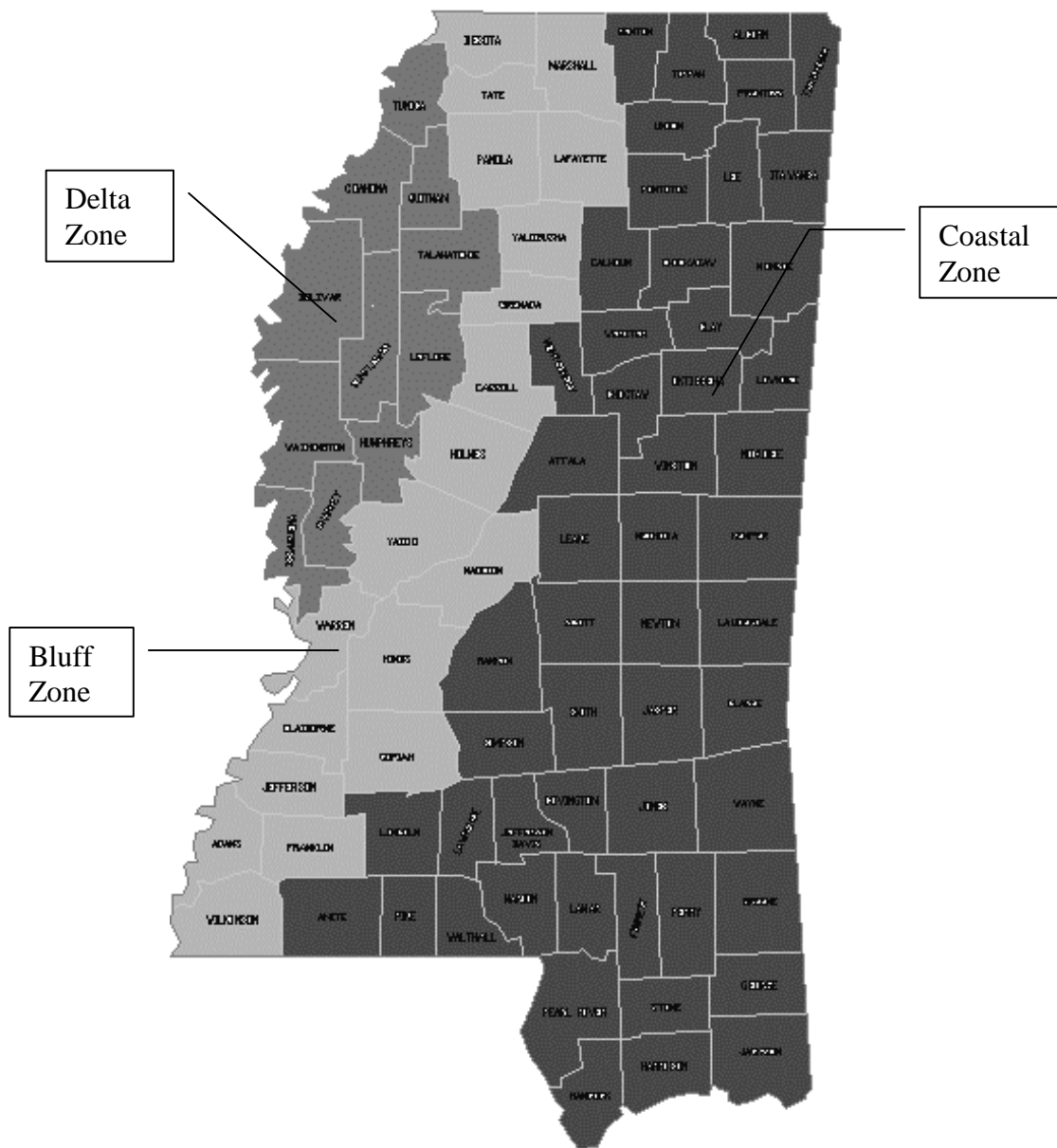
Mississippi  
 USDA Natural Resources Conservation Service  
 Environmental Quality Incentives Program  
 Location Map for Priority Areas  
 and  
 List of Statewide Natural Resource Concerns  
 FY 2002



# Environmental Quality Incentive Program

## Statewide Ranking Zones

### FY2002



## STATEWIDE CONCERN SUMMARY DESCRIPTION

### WATER QUALITY - SEDIMENTATION

**PURPOSE:** This concern addresses cropland in the State of Mississippi where the current soil erosion rate is excessive (exceeds the soil loss tolerance rate or "T") and critically eroding areas on other land uses. Excessive soil erosion, classified as sheet and rill erosion, is common on sloping cropland in the state. Ephemeral and gully erosion may also occur on cropland. Runoff from cropland containing sediment is a contributor to nonpoint source contamination of the state's surface waters. Conservation Management Systems (CMS) will include the Resource Management System (RMS) or the Acceptable Management System (AMS) levels of treatment. The AMS level of treatment is approved only for MLRA 134. Land treatment under this AMS will result in soil loss reduced to 2T or less.

**ELIGIBLE LAND:** Cropland and critically eroded areas on all agricultural land uses.

#### APPLICATION RANKING CRITERIA:

<u>Criteria</u>	<u>Units</u>	<u>Points/Unit</u>
Sediment Yield Reduced	tons	1
Sheet and Rill Erosion Reduction	tons/acre/year	1
Ephemeral Gully Erosion Reduction	tons/year	2
Classic Gully Erosion Reduction	tons/year	4
Well Decommissioning	no.	500
<b>Buffer Incentives*</b> (Add points for any new acres created under any program or operation)		
Filter Strips/Field Border	acres	160
Riparian Forest Buffer	acres	200
Grassed Waterway	acres	80

\* See appendix C for Buffer Incentive Guidelines

#### SUPPORTING DOCUMENTATION AND PROCEDURE

- The Benchmark and CMS soil loss rates will be documented on the appropriate EQIP Soil Loss Computation Worksheet(s), for sediment yield reduced, sheet and rill, ephemeral and classic gully erosion. A weighted average sheet and rill erosion rate for the offered fields will be calculated to obtain the before and after soil loss information needed. Ephemeral and classic gully erosion calculations documented on the EQIP Soil Loss Computation Worksheet shall be for the annual headcut and/or bank erosion advancement. To be eligible active headcutting and/or bank erosion must be present. Use the direct volume method.

## ELIGIBLE CONSERVATION PRACTICE INFORMATION:

The following table lists conservation practices eligible for cost-share for the Water Quality Sedimentation resource concern:

### WATER QUALITY - SEDIMENTATION CONSERVATION PRACTICES ELIGIBLE FOR COST-SHARE

Practice Code	Name	Units
329*	Residue Mgt. - NT	Ac
329C*	Residue Mgt. - RT	Ac
340	Cover and Green Manure Crop	Ac
342	Critical Area Planting	Ac
350	Sediment Basin	No
351	Well Decommissioning	No
362	Diversion	Ft
386	Field Border	Ac
391A	Riparian Forest Buffer	Ac
393	Filter Strip	Ac
410	Grade Stabilization Structure	No
412	Grassed Waterway	No
512	Past. & Hayland Pltg. (Cropland Conversion)	Ac
585	Contour Strip Cropping	Ac
586	Stripcropping Field	Ac
587	Structure for Water Control	No
600	Terraces	**
612	Tree Establishment (Cropland Conversion)	Ac
638	Water & Sediment Control Basin	No
734	Vegetative Barrier	**

**Note:** Any practice in the Mississippi Field Office Technical Guide (FOTG) Section IV may be planned in any EQIP contract **as non-cost shared** if NRCS determines the practices are needed to support or maintain a planned Conservation Management System.

\* Limited to one practice per field per year either 329A or 329C.

\*\* Refer to Cost List

Practices not listed above that are required for a RMS and included in the conservation plan will be documented in the plan as NC practices.

Refer to appendix A for essential practices and requirements for RMS quality criteria.

**PERFORMANCE MEASUREMENT:** Progress in reaching the project objectives will be obtained from data documented in the CPO and reported using the PRMS reporting system.

# EQIP Soil Loss Computation Worksheet

RUSLE - FOTG, Sec. 1.0.3

Name: \_\_\_\_\_  
 Rainfall Factor \_\_\_\_\_ Farm No. \_\_\_\_\_ Tract No. \_\_\_\_\_  
 Adjusted Rainfall Factor \_\_\_\_\_ County: \_\_\_\_\_  
 Present Condition: \_\_\_\_\_

## Sheet and Rill

$$A = R \times K \times LS \times C \times P$$

Soil Map Unit	K	Field		T	L(ft)		S(%)		LS		C		P*		Soil Loss (tns/ac/yr) x	
		No.	Acre		B	A	B	A	B	A	B	A	B	A	B	A

### P\* Subfactor Calculations

Erosion Index (EI) (10yr) \_\_\_\_\_

Cover Mgt. Condition (table 1) \_\_\_\_\_

Hydrologic Soil Group \_\_\_\_\_

Ridge Height (table 2) \_\_\_\_\_

Row or Furrow Grade \_\_\_\_\_

Field No.	Contouring X Terracing X		Field Strip Cropping Contour Buffer Strips X		Vegetative Barrier X		Contour Strip Cropping	Total P
	B							
	A							
	B							
	A							
	B							
	A							

### Location Map

### TOTALS

Avg. tns/ac/yr - Sheet & Rill Erosion  
 Total tns/yr Acre Avg. tns/ac/yr  
 B A ÷Affected B A

Remarks

Calculated by \_\_\_\_\_  
 Title \_\_\_\_\_  
 Date \_\_\_\_\_



**EQUIP SOIL LOSS COMPUTATION WORKSHEET**  
**Gully and Sediment Yield Reduction Calculations**

Name \_\_\_\_\_ County \_\_\_\_\_

Farm No. \_\_\_\_\_ Tract No. \_\_\_\_\_

Present Condition: \_\_\_\_\_

**Ephemeral Gully:  $EC = L \times W \times N \times V/A$  (Direct Volume Method)**

Field	L	x	W	x	D	x	N	x	V	÷	A	=	Tons/Ac/Year		
													Total	B	A
													Tons/Yr = Ins/Ac/Yr X ( ) Acre =		

**Classic Gully:  $G = \{ L \times D \times (TW + BW)/2 \times V \}$  (Direct Volume Method)**

Field	TW	+	BW	÷	2	x	L	x	D	x	V	=	Tons/year		
														B	A
													Total		

Table 1 Approximate Unit of Weight of Soil					B	A
Soil Textural Class	Range Lbs/ft <sup>3</sup>	Average Lbs/ft <sup>3</sup>	Average Tons/ft <sup>3</sup>	Total		
Clay	70 - 95	82.5	.041	Total (other Erosion)		
Silty clay, silty clay loam	75 - 100	87.5	.044			
Sandy clay, loam, sandy loam	80 - 105	92.5	.046			
Clay loam, silt, silt loam	85 - 100	92.5	.046			
Sandy clay loam, loamy sands, sands	95 - 100	102.5	.051	Total Acres Affected		

**Sediment Yield Reduction Calculations**

Field Number	Practice Code	Total after gross erosion		% of Field Contributing		Delivery Ratio		Trapping Efficiency		Tons Reduced
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
<b>TOTAL</b>										

## **NRCS PROCEDURE FOR ESTIMATING SEDIMENT YIELDS**

### **(Used With "After" Gross Erosion)**

Sediment yield (Y) is the gross (total) erosion (E) minus the sediment deposited enroute to the point of concern. This deposition may occur within the field, it may occur as a result of planned measures that trap, retain, or filter sediments or it may be a combination of these. The point of concern is usually defined as that point at which the sediment becomes a hazard, a pollutant, or a nuisance.

Gross erosion is the sum of all the water erosion in the drainage area, field, or treatment unit. It may include sheet and rill, ephemeral, classic, roadbank, streambank, or channel erosion. The methods used to determine gross erosion are shown in Section I-D of the NRCS Field Office Technical Guide. Documentation can be done on the EQIP Soil Loss Computation Worksheets.

### **PREDICTIVE EQUATION**

Important variables affecting sediment yield are size of the drainage area, topography, channel density, soils, surface roughness, and distance to flow disruption. Other variables exist, but often are accounted for in the gross erosion calculations.

The equation used to determine sediment yield is:

$$Y = E \times (DR \times TFV)$$

where

Y = Sediment Yield expressed in tons

E = Gross Erosion expressed in tons

DR = Sediment delivery ratio (< 1.0)

TFV = Trapping or filtering value of BMP

### **SEDIMENT DELIVERY RATIO**

The Sediment Delivery Ratio is an expression of the proportion of sediment yielded versus the gross erosion shown as a fraction. The point of concern for calculating the effectiveness of a Best Management Practice (BMP) is the point at which the practice exists and begins to function.

Determining the Sediment Delivery Ratio (DR) is of primary concern if conservationists are to make realistic estimates of sediment yield. Many factors influence sediment delivery ratio and include sediment source, proximity of sediment source, transport system, texture of eroded material, types and extent of deposition areas, and watershed characteristics. The following Tables have been developed for determining Sediment Delivery Ratios:

Table 1. SEDIMENT DELIVERY RATIOS/1

	SOIL TEXTURES*		
	CLAYEY	LOAMY	SANDY
	0.80	0.40	0.25

1/ NRCS - National Engineering Handbook - Section 3

USEPA Technical Report No. EPA-600/2-76/151

\* Refer to Table 2

Table 2. SOIL TEXTURAL CLASSES 1/

<u>General Textures</u>	<u>Specific Textures</u>
Clayey Soils + 40% clay	Sandy clay, silty clay, clay
Loamy Soils	Clay loam, sandy clay loam, silty clay loam, very fine sandy loam, loam, silt loam, silt, coarse sandy loam, sandy loam, fine sandy loam
Sandy Soils + 70% sand	Sands, Loamy sands

The ratios as shown in Table 1 are average. For erosion sources directly linked to the point of concern such as streambank erosion and classic gully erosion a sediment delivery ratio of 0.95 should be used. Sediment yield may actually be calculated in separate steps where sediment sources come from sheet and rill erosion and a degrading classic gully since the sediment delivery ratios and methods of treatment may be different.

## TRAPPING AND FILTERING EFFECTIVENESS

Deposition within the field as a result of topography and deposition as the result of a conservation practice can be separated for the purpose of analyzing the benefits of certain Best Management Practices (BMP). Certain practices have no other benefits except their abilities to trap, retain and/or filter sediment. These practices are designated as vegetative and structural. Examples of vegetative practices are: Filter Strip and Riparian Forest Buffer. Examples of structural practices are: Sediment Basin, Structure for Water Control and Water Sediment Control Basin, Grade Stabilization Structure, Irrigation Tailwater Recovery, PTO Terrace, and Pollution Retention Reservoir. Factors that influence the ability of vegetative practices to trap or filter sediment include: filter width and height, filter density, depth of flow and velocity and sediment size. Some factors that influence the effectiveness of structural practices are: retention time, ponding depth, and sediment size. The following Tables can be used to determine the Trapping/filtering Value (TFV) of the vegetative and structural practices:

Table 3. FILTERING VALUES OF VEGETATIVE PRACTICES\*

PRACTICES	FILTER WIDTH	VALUES		
		Clayey	Loamy	Sandy
Filter Strip and	6 to 10 ft.	.40	.50	.70
Riparian Forest	> 10 to 15 ft.	.55	.65	.75
Buffer	> 15 to 30 ft.	.65	.80	.90
	> 30 ft.	.70	.90	.95

\* Based on uniform flows not exceeding 2" depth

Table 4. TRAPPING VALUES OF STRUCTURAL PRACTICES

PRACTICES	VALUES		
	CLAYEY	LOAMY	SANDY
Pollution Retention Reservoir (204)	.60	.80	.90
Sediment Basin (350)	.60	.80	.90
Grade Stabilization Structure (410)*	.50	.62	.70
Irrigation Tailwater Recovery (447)	.65	.80	.90
Structure for Water Control (587)**	.55	.66	.75
Water and Sediment Control Basin (638):			
a. Permanent Pool	.60	.72	.85
b. Other (dry)	.48	.60	.70
PTO Terrace (600)	.48	.60	.70

\* Based on 24 hour runoff removal rate. If based on peak flow, use values listed for Water and Sediment Control Basin (638) dry.

\*\* Based on seasonal flooding or impoundment of larger areas using flash board riser.

## CALCULATING SEDIMENT YIELD REDUCED

- Step # 1. Determine gross (total) erosion (E) and convert to tons for the area of concern.
- Step # 2. Determine appropriate Sediment Delivery Ratio (DR) and apply to equation.
- Step # 3. Determine Trapping/Filtering Value (TFV) and apply to equation.
- Step # 4. Calculate Sediment Yield (Y).

### EXAMPLES:

1 26 ac

Step # 1: RUSLE soil loss determined to be  
14 tons/ac/yr.

Filter Strip planned along stream in lower corner of  
Field 1. Strip width = 20'

Erosion control system reduces soil loss to  
6 tons/ac/yr  
 $26 \text{ ac} \times 6 = 156$  total tons for field

Only 18 acres of field drains into the Filter Strip. Percent of field contributing is  $18\text{ac}/26\text{ac}$  which = 69%

Step # 2. The field is loamy in texture thusly the DR from Table 1 - is .40.

Step # 3. The Trapping/Filtering Value - TFV of filter Strip from Table 3 - is .80.

Step # 4  $156 \times .69 \times .80 \times .40 = 34.4$  tons

Thusly, the Filter Strip filtered 34.4 tons. For EQIP purposes this converts to 34 points.

# EQIP Soil Loss Computation Worksheet

RUSLE - FOTG, Sec. 1.0.3

Name: John Doe

Rainfall Factor 450

Farm No. 2 Tract No. 1

Adjusted Rainfall Factor N/A

County: \_\_\_\_\_

Present Condition: Soybeans - Spring till disk 2X, 1FC, Plant narrow row. No fall tillage.

## Sheet and Rill

$$A = R \times K \times LS \times C \times P$$

Soil Map Unit	K	Field No.	Acre	T	L(ft) B A	S(%) B A	LS B A	C B A	P* B A	Soil Loss (tns/ac/yr) x B A
LoB2	.49	1	26	3	200 200	2 2	.310 .310	.265 .265	1 .94	14 6

### P\* Subfactor Calculations

Erosion Index (EI) (10yr) \_\_\_\_\_

Cover Mgt. Condition (table 1) \_\_\_\_\_

Hydrologic Soil Group \_\_\_\_\_

Ridge Height (table 2) \_\_\_\_\_

Row or Furrow Grade \_\_\_\_\_

Field No.	Contouring X	Terracing X	Field Strip Cropping Contour Buffer Strips X	Vegetative Barrier X	Contour Strip Cropping	Total P
1	B	1.0				1.0
	A	0.94				.094
	B					
	A					
	B					
	A					

### Location Map

### TOTALS

364 156

Avg. tns/ac/yr - Sheet & Rill Erosion  
 Total tns/yr Acre Avg. tns/ac/yr  
B A ÷ Affected B A  
 364 126 26 14 6

Remarks

Calculated by Jane Doe  
 Title DC  
 Date 10/30/01

**EXAMPLE -EQIP SOIL LOSS COMPUTATION WORKSHEET**  
Gully and Sediment Yield Reduction Calculations

Name John Doe County Hinds  
Farm No. 1 Tract No. 2

Present Condition: Narrow row soybeans and filter strip.

**Ephemeral Gully:  $EC = L \times W \times N \times V/A$  (Direct Volume Method)**

Field	L	x	W	x	D	x	N	x	V	÷	A	=	Tons/Ac/Year		
													Total	B	A
													Tons/Yr = Ins/Ac/Yr X ( ) Acre =		

**Classic Gully:  $G = \{ L \times D \times (TW + BW)/2 \times V \}$  (Direct Volume Method)**

Field	TW	+	BW	÷	2	x	L	x	D	x	V	=	Tons/year		
														B	A
													Total		

Table 1 Approximate Unit of Weight of Soil				B A		
Soil Textural Class	Range Lbs/ft <sup>3</sup>	Average Lbs/ft <sup>3</sup>	Average Tons/ft <sup>3</sup>	Total		
Clay	70 - 95	82.5	.041	Total (other Erosion)		
Silty clay, silty clay loam	75 - 100	87.5	.044			
Sandy clay, loam, sandy loam	80 - 105	92.5	.046			
Clay loam, silt, silt loam	85 - 100	92.5	.046			
Sandy clay loam, loamy sands, sands	95 - 100	102.5	.051	Total Acres Affected		

**Sediment Yield Reduction Calculations**

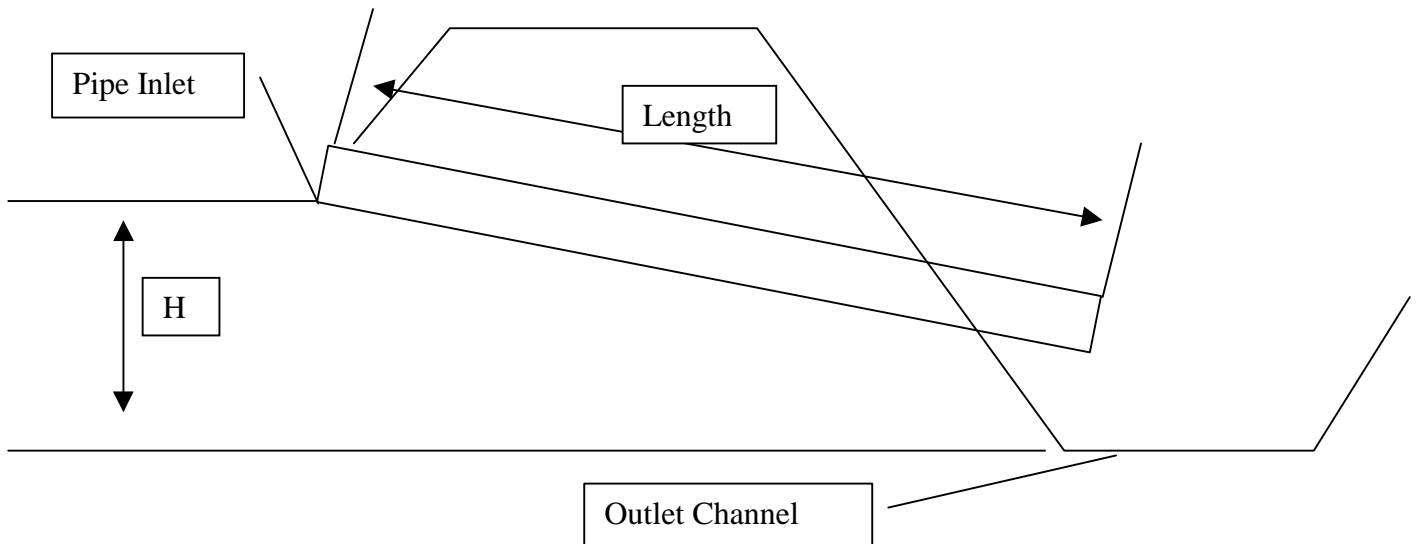
Field Number	Practice Code	Total after gross erosion		% of Field Contributing		Delivery Ratio		Trapping Efficiency		Tons Reduced
1	393	156	x	.69	x	.4	x	.8	=	34.4
			x		x		x		=	
			x		x		x		=	
			x		x		x		=	
			x		x		x		=	
			x		x		x		=	
TOTAL										34

## DEFINITIONS

1. **Gross Soil Erosion** -- soil erosion as defined by USLE/RUSLE, and the sum of all water erosion in the field or treatment unit and can include sheet and rill, ephemeral, classic, roadbank, streambank, or channel erosion.
2. **Sediment Yield** -- amount of sediment which moves off a unit area, e.g. edge of field losses.
3. **Point of Concern** -- the point at which sediment becomes a hazard, pollutant, or nuisance.
4. **Sediment Delivery** -- sediment that is transported to the point of concern.
5. **Sediment Delivery Ratio** -- the ratio between sediment yield and gross erosion. (a function of soil texture and drainage density).



## EQIP Structure Replacement



H = Elevation difference between inlet and outlet channel (feet).

L = Pipe length (feet).

D = Pipe diameter (feet).

T = Soil loss (tons).

Equation:

$$T = H \times 2 \times D \times L \times 0.05$$

Example: Calculate Soil Loss for the following pipe replacement.

Given: Inlet Elevation = 97.5

Outlet Channel = 89.0

Pipe Length = 26'

Pipe Diameter = 22"

$$T = (97.5' - 89.0') \times 2 \times (22"/12) \times 26' \times 0.05 = 40.5 \text{ tons}$$

### Criteria for EQIP Structure Replacement

- No sediment trapping values will be calculated for a pipe (structure) replacement.
- Pipe replacement will be used only when it is apparent (using sound judgement) that the structure will fail within the 5-year contract period. (i.e. rusted or unraveled cmp, backslope washed out, etc.).

## STATEWIDE CONCERN SUMMARY DESCRIPTION

### WATER QUALITY - ANIMAL WASTE

**PURPOSE:** This concern addresses land in the State of Mississippi where waste associated with agricultural animal enterprises may adversely affect soil, water, air, plant, and animal resources. Unmanaged animal waste can be a major contributor to non point source pollution of both surface water and ground water. Animal waste management systems are planned using a systematic approach for production through utilization.

**ELIGIBLE LAND:** All lands on which animal waste is applied.

#### APPLICATION RANKING CRITERIA:

<u>Criteria</u>	<u>Units</u>	<u>Points/Unit</u>
Animal Waste Managed (AWM)	tons/yr	50
AWM Lagoon Pumpout	cu/ft	0.8
Sheet & Rill Erosion Reduction	tons/ac/yr	1
Ephemeral Gully Erosion Reduction	tons/yr	2
Classic Gully Erosion Reduction	tons/yr	4
Adjacent to Stream	bonus	2000-6000
Carcass Management for Composting	tons/yr	500
Carcass Mgt. for Incineration/Freezer units	tons/yr	250
Well Decommissioning	no.	500
<b>Buffer Incentives*</b> (Add points for any new acres created under any program or operation)		
Filter Strips/Field Border (393 or CP21)	acres	160
Riparian Forest Buffer (391A or CP22)	acres	200
Grassed Waterway (412 or CP8)	acres	80

\* See appendix C for Buffer Incentive Guidelines

#### SUPPORTING DOCUMENTATION:

Progress in reaching the project objectives will be obtained from data documented in the CPO and reported using the PRMS reporting system.

- Animal Waste Managed - tons or cubic feet of animal waste properly utilized by a waste management system. Use the attached EQIP Animal Waste Worksheet to calculate tons or cubic feet of waste. When determining waste tonnage eligibility, the benchmark condition shall equal the tons of waste currently being properly utilized. The CMS condition shall equal the tons of waste which can be properly utilized by an approved waste management system or the total waste production, whichever is less. The following criteria shall be used to determine if the tonnage is properly utilized:

1. Waste application rates do not exceed the annual crop uptake rate or the soil intake rate.
2. Waste application is postponed between Oct. 1 and March 31 North of Interstate 20 and between Nov. 1 and March 31 South of Interstate 20 unless cool season grasses are present.
3. Waste application is no closer than 50 feet to any intermittent stream or water body or no closer than 150 feet to any perennial stream.
4. Location of waste application fields is identified in the producer's waste utilization plan, or if utilized off-site, shall be documented in the producer's log. The log shall be a permanent record of all transactions of animal waste consisting of the name, signature, and address of recipient, date of transaction, and amount of animal waste transferred.

Responsible application of waste shall be encouraged by the producer by providing the recipient a copy of "Management Guidelines for Land Application of Animal Waste" (page 19) and a nutrient sample analysis for that year. Waste transferred off-site shall be considered properly utilized by the producer only when the producer has obtained and provides a copy to NRCS of written permission from the recipient to apply wastes on designated off-site fields. The off-site waste may be land applied by the producer or the recipient.

- Soil loss rates will be documented on an EQIP Soil Loss Computations worksheet
- Refer to Appendix A for essential practices and requirements for RMS quality criteria.
- Adjacent to Stream - to determine an eligible stream use the USGS topo map. Any stream identified on the topo map by a solid or broken blue line will be considered a stream. If the stream is not on the topo map this criteria can not be considered. If litter can be applied within 50 feet of the stream, then the field is considered adjacent. Compute the drainage area of the field where animal waste is spread by determining the acres of the field that drains into the identified stream. Use the following chart to assign points.

Points are assigned based on the following chart:

<u>Drainage area of the field</u>	<u>Points</u>
Less than 10 acres	2000
11 - 20 acres	3000
21 - 30 acres	4000
31- 40 acres	5000
greater than 40 acres	6000

- Carcass Management - Tons of carcass composted or incinerated. Refer to the formula and examples on the EQIP Animal Waste Worksheet (page 18). Up to 10% of the animal waste produced by a poultry operation may be considered as animal waste properly utilized in computing the application ranking criteria for a composting facility.
- The Mississippi Board of Animal Health must approve each poultry complex for collection, transportation and disposal of dead birds. Producers must be affiliated with the permitted complex before freezer units can be planned. Currently the only facility permitted is the Magee Complex of Tyson.
- Resource management plan on file

## ELIGIBLE CONSERVATION PRACTICE INFORMATION:

The following table lists conservation practices eligible for cost-share under the Animal Waste resource concern:

### ANIMAL WASTE CONSERVATION PRACTICES ELIGIBLE FOR COST-SHARE

Practice Code	Name	Units
313	Waste Storage Facility	*
317	Composting Facility	Sq Ft
340	Cover and Green Manure Crop	Ac
342	Critical Area Planting	Ac
351	Well Decommissioning	No
359	Waste Treatment Lagoon	No
362	Diversion	Ft
386	Field Border	Ac
391A	Riparian Forest Buffer	Ac
393	Filter Strip	Ac
410	Grade Stabilization Structure	No
412	Grassed Waterway	No
512	Pasture & Hayland Planting	Ac
590	Nutrient Mgt.(manure sludge)	Sample
633	Waste Utilization	Ac
638	Water & Sediment Control Basin	No
720	Pollution Retention Reservoir	No
734	Vegetative Barrier	*
769	Incinerator	Each

**Note:** Any practice in the Mississippi Field Office Technical Guide (FOTG) Section IV may be planned in any EQIP contract **as non-cost shared** if NRCS determines the practices are needed to support or maintain a planned Conservation Management System.

\* Refer to Cost List

## PERFORMANCE MEASUREMENT:

Progress in reaching the project objectives will be obtained from data documented in the CPO and reported using the PRMS reporting system.

## Guidance for Calculating the Number of Animal Units in a Livestock Operation

An Animal Unit is defined as 1,000 pounds of live weight of any given livestock species or any combination of livestock species. A large confined livestock operation is defined as that which exceeds 1,000 Animal Units or 1,000,000 lbs. of live weight. The following table lists a number of live animals that are equivalent to an Animal Unit for most of the major animal species and the average weight of the animal. These weights may be used to convert from animal numbers to Animal Units. When the weights in the table do not match those of the operation being evaluated, the number of animals per Animal Unit must be modified to fit the situation.

ANIMAL TYPE	APPROXIMATE AVERAGE OF ANIMAL WEIGHT (LB)	NUMBER OF ANIMALS PER ANIMAL UNIT	NUMBER OF ANIMALS IN A LARGE CONFINED LIVESTOCK OPERATION
Beef or dairy calf	250	4	4,000
Beef or dairy weaned calf	550	1.82	1,820
Beef Feeder	800	1.25	1,250
Beef Cow	1,000	1	1,000
Dairy Replacement Heifer	1,065	0.94	940
Dairy Cow	1,400	0.71	714
Layer	4	250	250,000
Pullet (<3 months old)	2.2	455	454,545
Pullet (>3 months old)	4	250	250,000
Broiler	2.2	455	454,545
Turkey Hen	20	50	50,000
Turkey on feed	15	66.67	66,667
Wean-Feeder Swine	30	33.3	33,333
Feeder-Finish Swine	135	7.41	7,410
Farrow-Wean Swine	433	2.31	2,310
Farrow-Feeder Swine	522	1.92	1,920
Farrow-Finish Swine	1,417	0.71	710
Replacement Gilt	150	6.67	6,670
Boar	400	2.5	2,500

Calculation for total pounds of live weight in the confined livestock operation:

<u>Animal Type</u>	<u>No. Animals</u>	<u>Avg. Animal Wt.</u>	<u>Total Live Wt.</u>
_____	_____	X _____	= _____
_____	_____	X _____	= _____
_____	_____	X _____	= _____
*Total			= _____

\*Producer not eligible for cost-share assistance for waste treatment facilities if the total exceeds 1,000,000 pounds.

## EQIP ANIMAL WASTE WORKSHEET

### Data:

A. Swine Waste	Units	Grower 40-220 lbs	Replacement gilt	-----Sow----- Gest. Lact.		Boar	Nursery 0-40 lbs
Weight lb/d/1000#		63.40	32.80	27.20	60.00	20.50	106.00

B. Dairy Waste		-----Cow----- Lact. Dry		Heifer
Weight lb/d/1000#		80.00	82.00	85.00

**C. Broiler Litter** = 17.80 lb/d/1000#  
**Layer Litter** = 13.4 lb/d/1000#  
**Pullet Litter** = 10.10 lb/d/1000#

### Formulas:

**1. Manure Weight** = lb/d/1000# x Number Animals x Avg. Live Weight x days/yr\* x ton/2000 lb

**2. Dead Bird Weight** = Number Birds x Mortality Rate x Market Weight x Batches x ton/2000 lb

**Note:** Market weight to be provided by producer.

### Examples:

$$\frac{63.40 \text{ lb Manure}}{\text{day x 1000\#}} \times 3520 \text{ finish hogs} \times \frac{135 \text{ lbs}}{\text{hog}} \times \frac{365 \text{ days}}{\text{year}} \times \frac{\text{tons}}{2000 \text{ lb}} = 5,498 \text{ tons/yr}$$

$$\frac{80.00 \text{ lb Manure}}{\text{day x 1000\#}} \times 100 \text{ dairy cows} \times \frac{1200 \text{ lbs}}{\text{cow}} \times \frac{76 \text{ days}}{\text{year}} \times \frac{\text{tons}}{2000 \text{ lb}} = 365 \text{ tons/yr}$$

$$\frac{17.80 \text{ lb Manure}}{\text{day x 1000\#}} \times 100,000 \text{ birds} \times \frac{2 \text{ lb}}{\text{bird}} \times \frac{231 \text{ days}}{\text{year}} \times \frac{\text{tons}}{2000 \text{ lb}} = 411 \text{ tons/yr}$$

$$100,000 \text{ birds} \times 5\% \text{ mortality} \times 4.2 \text{ lb market weight} \times \frac{5.5 \text{ batches}}{\text{year}} \times \frac{\text{tons}}{2000 \text{ lb}} = 58 \text{ tons/yr}$$

### Calculations:\*\*

\* days/yr represents period of time the animals are confined within the waste treatment system

\*\* round answer to nearest tons/year

## MANAGEMENT GUIDELINES FOR LAND APPLICATION OF ANIMAL WASTE

Testing. Use periodic soil tests to monitor the nutrients available in the soil and to identify any increase in materials that may be toxic to plants and/or animals. Have the waste analyzed to determine quantities of nutrients being applied.

Application. Spread solid and liquid wastes uniformly to prevent excessive application rates in a small area. Do not cover more than 20 percent of plant leaves with solid waste. Avoid application of waste to grasses during germination and seedling stages. The best time for application is following each hay harvest. Avoid soil compaction by applying wastes on soils that are dry enough to support spreading equipment.

Utilization. Use waste to provide fertility for crop, forage, or fiber production. Avoid application of waste at rates greater than the crop's nutrient requirements. Supplemental fertilizer will be needed to balance nitrogen, phosphate, and potash applications with plant needs. Because nutrients from animal waste gradually become available over a period of years, annual applications on the same field may need to be reduced in succeeding years. Contact your local NRCS or Cooperative Extension Service Office for additional assistance.

Incorporation. Incorporation or injection of waste into the soil conserves nitrogen, reduces the chance of rain washing pollutants into streams, and reduces odor. Specialized equipment is required.

Odor Control. When spreading animal waste on the surface take advantage of the prevailing wind direction with respect to neighbors. Apply waste on days and at times when neighbors are less likely to be involved in outdoor recreation. Morning applications usually reduce the spread of odors because air is more likely to be rising.

Storage. Storage of dry waste may be necessary to facilitate application rates, timing of application or crop needs. A permanent structure (dry stack) may be used or waste may be stored outdoors in a well-drained area away from floodplains and other water bodies. The piles shall be protected from runoff by a diversion if necessary or surrounded by a berm to prevent leaching from the piles. Waste stored more than 6 days shall be completely covered by a waterproof plastic to prevent fly breeding. Waste should not be piled more than 7 feet deep to help prevent overheating.

Water Quality. To prevent animal waste pollutants from being washed into streams, practice effective erosion control and leave a vegetated buffer zone between waterways or streams and the land on which waste is applied. Do not apply waste to land at rates greater than soil intake or when there is a high probability of rainfall within the following 3 days, immediately after a rain when the soil is saturated with water, or when the ground is frozen.

Use on Vegetables. Do not apply animal waste to root vegetable crops during the current growing season, or to above-ground vegetables for one month prior to harvest.

Regulatory Agencies. Comply with requirements of public health and pollution control regulatory agencies. The Mississippi Department of Environmental Quality, Office of Pollution Control, P. O. Box 10385, Jackson, MS 39289-0385 is the pollution control regulatory agency and the Mississippi State Department of Health, 2423 North State Street, P.O. Box 1700, Jackson, MS 39215-1700 is the public health regulatory agency.

Land application of non-poultry animal waste must be no closer than 300 feet to an unowned occupied dwelling and no closer than 50 feet to the property line. Land application of poultry waste must be no closer than 150 feet to unowned occupied dwelling and no closer than 25 feet to the property line.

Land application of waste shall be no closer than 50 feet to any intermittent stream or no closer than 150 feet to any perennial stream or well. Intermittent streams will be indicated by a broken blue line and a perennial streams will be indicated by a solid blue line on the latest version of the United States Department of the Interior Geological Survey Quadrangle Map. The establishment of a 50-foot vegetative strip around the spray fields and livestock operation barns is recommended. The strip may incorporate grasses, shrubs, and trees. The vegetative strip should include a 25-foot strip of rapidly maturing trees, a 15-foot strip of tall shrubs, and a 10-foot strip of native grasses.

## STATEWIDE CONCERN SUMMARY DESCRIPTION

### WATER QUANTITY

**PURPOSE:** This concern addresses land in the State of Mississippi where aquifers are being depleted and improved irrigation water management is needed.

**ELIGIBLE LAND:** Cropland currently under irrigation where aquifer (ground water) is the source of irrigation water.

### APPLICATION EVALUATION CRITERIA

<u>Criteria</u>	<u>Units</u>	<u>Points/Unit</u>
Water Conserved	ac. inches/yr/ac	1
Well Decommissioning	no.	500
<b>Buffer Incentives*</b> (Add points for any new acres created under any program or operation)		
Filter Strips/Field Border	acres	160
Riparian Forest Buffer	acres	200
Grassed Waterway	acres	80

\*See appendix C for Buffer Incentive Guidelines

### ELIGIBLE CONSERVATION PRACTICE INFORMATION:

The following table lists conservation practices eligible for cost-share under the Water Quantity Resource Concern:

#### WATER QUANTITY CONSERVATION PRACTICES ELIGIBLE FOR COST-SHARE

<u>Practice Code</u>	<u>Name</u>	<u>Units</u>
329A	Residue Mgt. - NT	Ac
329C	Residue Mgt. - RT	Ac
351	Well Decommissioning	No
391A	Riparian Forest Buffer	Ac
393	Filter Strips	Ac
412	Grassed Waterway	No
430	Irrigation Conveyance Pipe	Ft
436	Irrigation Storage Reservoir	No
447	Irrigation Tailwater Recovery	No
449	Irrigation Water Management	Ac
533	Pump Plant Water Control	No
552B	Irrigation Regulating Reservoir	No
587	Structure for Water Control	No

**Note:** Any practice in the Mississippi Field Office Technical Guide (FOTG) Section IV may be planned in any EQIP contract **as non-cost shared** if NRCS determines the practices are needed to support or maintain a planned Conservation Management System.



## **SUPPORTING DOCUMENTATION AND PROCEDURE**

- Water use rates will be calculated using the Mississippi Engineering Design System (MEDS) or a comparable NRCS approved system. Acre inches of water used and systems efficiency expressed in percent will be the measurable units documented on the water conservation worksheet of MEDS and entered into “effects” in toolkit.
- Refer to Appendix A for essential practices and requirements for RMS quality criteria.

## **PERFORMANCE MEASUREMENT**

Progress in reaching the project objectives will be obtained from data documented in the CPO and reported using the PRMS reporting system.

## STATEWIDE CONCERN SUMMARY DESCRIPTION

### CONSERVATION FOR LIMITED RESOURCE FARMERS

**PURPOSE:** This concern addresses the need to increase the use of conservation practices by limited resource farmers (LRF) in Mississippi where over 60% of the farms have less than 160 acres and many are operated by limited resource farmers. This statewide concern will provide opportunities for socially disadvantaged persons to compete for EQIP funds against other applicants with similar economic resources. Participants must provide a written certification statement that establishes their status as a Limited Resource Farmer (LRF). (See attached form).

A basic set of conservation practices will be available for cost sharing with emphasis on reducing excessive erosion, improving grazing management, and planting trees. Although there are several tree planting cost share programs available at 50% cost share levels (FIP, SIP, and FRDP), EQIP will cost share up to 75% of actual cost not to exceed specified maximums for site preparation and tree establishment. Riparian Forest Buffers or Streamside Management Zones (SMZ) must be established along any perennial streams in accordance with Mississippi BMP Guidelines. Natural regeneration may be used to establish Riparian Forest Buffers on cut-over forestland only.

Funds for tree planting under this concern are not available for the following soils in the Alabama, Mississippi, and Arkansas Blackland Prairie MLRA (MLRA 135) - Okolona, Houston, Sumter, Demopolis, Brooksville, and Binnsville. (Mississippi Bulletin No. MS300-1-2 dated March 7, 1991).

**ELIGIBLE LANDS:** Cropland, pastureland, hayland and forestland

### APPLICATION EVALUATION CRITERIA

<u>Criteria</u>	<u>Units</u>	<u>Points/Unit</u>
Sheet and Rill Erosion Reduction	tons/ac/yr	1
Ephemeral Gully Erosion Reduction	ton/yr	2
Classic Gully Erosion Reduction	tons/yr	10
Sediment Yield Reduction	tons	5
Grazing Cells Created*	each	50
Tree Establishment	acres	50
Grazing System	acres	1
Pest Management**	acres	5

\*Benefited points for each grazing cell created. A Grazing Cell is defined as an area that is a subdivision of a grazing management unit that is enclosed by fence and devoted to the production of forage for harvest primarily by grazing animals.

\*\*Chemical control - weeds only.

**BUFFER INCENTIVES\*** (Award points for any **new acres** created under any program or operator.)

Filter Strips/Field Border	acres	160 points/ac
Riparian Forest Buffer	acres	200 points/ac
Grassed Waterway	acres	80 points/ac

\* See appendix C for Buffer Incentive Guidelines

## **SUPPORTING DOCUMENTATION AND PROCEDURE**

- Soil loss rates will be documented on the appropriate EQIP soil loss computation worksheets.
- Sediment yield reduction calculations will be documented on the Soil Loss Computation Work Sheet for Sediment Yield Reduction
- Soil Loss Estimate Chart for Pastureland  
MS Technical Note - AGRON-49 to determine before and after soil loss
- Controlled - Rotation Grazing Record and Management Information; Basic Management Level (optional for planning Prescribed Grazing Systems)
- Planning aid for forage, feed production and use

## **ELIGIBLE CONSERVATION PRACTICE INFORMATION:**

The following table lists conservation practices eligible for cost-share under the Conservation for Limited Resource Farmers resource concern:

### **CONSERVATION FOR LIMITED RESOURCE FARMERS CONSERVATION PRACTICES ELIGIBLE FOR COST-SHARE**

Practice Code	Name	Units
<b>Erosion Control and Grazing Management</b>		
329A	Residue Management-No Till	Ac
342	Critical Area Planting	Ac
350	Sediment Basin	No.
362	Diversion	Ln.Ft.
378	Pond	No.
393	Filter Strips	Ac
410	Grade Stabilization Structure	No
412	Grassed Waterways	No
512	Pasture & Hayland Planting	Ac
528A	Prescribed Grazing	Ac
561	Heavy Use Area Protection	Sq Ft
587	Structure for Water Control	No
590	Nutrient Mgt. (Manure)	Sample
595	Pest Mgmt. (Weed Control-Pasture)	Ac

**CONSERVATION FOR LIMITED RESOURCE FARMERS  
CONSERVATION PRACTICES  
ELIGIBLE FOR COST-SHARE  
(Continued)**

Practice Code	Name	Units
614	Trough or Tank	No
728	Stream Crossing	No
734	Vegetative Barrier	*
<b>Forestry Practices</b>		
338	Prescribed Burning	Ac
391A	Riparian Forest Buffer	Ac
394	Firebreak	Ft
490	Forest Site Prep.	Ac
612	Tree Establishment	Ac
655	Forest Harvest Trails and Landings	Ac

\* Refer to Cost List

**Note:** Any practice in the Mississippi Field Office Technical Guide (FOTG) Section IV may be planned in any EQIP contract **as non-cost shared** if NRCS determines the practices are needed to support or maintain a planned Conservation Management System.

- Refer to appendix A for essential practices and requirements for RMS quality criteria.

**PERFORMANCE MEASUREMENT:**

Progress in reaching the project objectives will be obtained from data documented in the CPO and reported using the PRMS reporting system.

**LIMITED RESOURCE FARMER CERTIFICATION STATEMENT  
FOR THE ENVIRONMENTAL QUALITY INCENTIVE PROGRAM**

I hereby certify that my household income is less than \$25,000.00 per year, that I do not own more than 160 acres of land, and that I have reviewed and meet the guidelines described in NRCS Mississippi Bulletin No. 180-6-6 dated April 16, 1996, which provides identifying characteristics of a Limited Resource Farmer.

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**Participant**

---

**Date**

## STATEWIDE CONCERN SUMMARY DESCRIPTION

### GRAZING LANDS

**PURPOSE:** This concern addresses land in the State of Mississippi to protect the soil health, reduce runoff, prevent the transport of excess nutrient and animal waste, and maintain or improve the productivity of adaptable forages; thus ensuring sustainability.

**ELIGIBLE LANDS:** Pasture and hayland.

#### APPLICATION RANKING CRITERIA:

<u>Criteria</u>	<u>Units</u>	<u>Points/Unit</u>
Grazing Cells Created*	each	500
Sheet and Rill Erosion Reduction	tons/ac/yr	1
Classic Gully Erosion Reduction	tons/yr	10
Grazing System	acre	5
Pest Management**	acre	10
Well Decommissioning	no.	500

**Buffer Incentives\*\*\*** (Add points for any new acres created under any program or operation)

Riparian Forest Buffer	acres	1000
------------------------	-------	------

\* Benefited points for each grazing cell created. A Grazing Cell is defined as an area that is a subdivision of a grazing management unit that is enclosed by fence and devoted to the production of forage for harvest primarily by grazing animals.

\*\* Chemical control - weeds only.

\*\*\* See appendix C for Buffer Incentive Guidelines

#### SUPPORTING DOCUMENTATION:

- Soil loss rates will be documented on the appropriate EQIP soil loss computation worksheet.
- FOTG, Section II-J to determine Expected Yields (AUM)
- Controlled - Rotation Grazing Record and Management Information; Basic Management Level (optional for planning Prescribed Grazing Systems)
- Planning aid for forage, feed production and use

## ELIGIBLE CONSERVATION PRACTICE INFORMATION:

The following table lists conservation practices eligible for cost-share under the Grazing Lands resource concern:

### GRAZING LANDS CONSERVATION PRACTICES ELIGIBLE FOR COST-SHARE

Practice Code	Name	Units
329A	Conservation Tillage	Ac
342	Critical Area Planting	Ac
351	Well Decommissioning	No
378	Pond	No
391A	Riparian Forest Buffer	Ac
410	Grade Stabilization Structure	No
512	Pasture & Hayland Planting	Ac
528A	Prescribed Grazing	Ac
595	Pest Mgmt. (Weed Control Only)	Ac
614	Trough or Tank	No
728	Stream Crossing	No
561	Heavy Use Area Protection	Sq Ft

**Note:** Any practice in the Mississippi Field Office Technical Guide (FOTG) Section IV may be planned in any EQIP contract **as non-cost shared** if NRCS determines the practices are needed to support or maintain a planned Conservation Management System.

- Refer to appendix A for essential practices and requirements for RMS quality criteria.

### PERFORMANCE MEASUREMENT:

Progress in reaching the project objectives will be obtained from data documented in the CPO and reported using the PRMS reporting system.

PASTURE SUITABILITY GROUP 11a Upland, moderately deep, medium-textured soils

Soils: Annemaine, Bude, Calloway, Columbus, Dulac, Falkner, Grenada, Izagora, Kolin, Lax, Leverett, Loring, Ora, Paden, Providence, Prentiss, Savannah, Siwell, Tippah, Tippo

Moderately well and somewhat poorly drained loamy acid soils with a root zone of 20 to 40 inches. Available water capacity is moderate.

Soils suited to most commonly grown forage plants. Production is moderately high when adequately fertilized and properly managed. The soils usually require lime.

Expected Yields (AUM) <sup>1</sup>

Adapted Species or Mixture	Fertilizer			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total (AUM)	Tons/Ac Hay
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O														
Hybrid	134	60	60					1.5	2.0	2.0	1.5	1.0	0.5			8.5	4.0
Bermudagrass	67	40	40					0.9	1.0	1.0	0.8	0.5	0.3			4.5	2.0
+Legume <sup>2</sup>		80	80			1.0	1.5	1.8	1.5	2.0	1.2	1.0	0.5			10.5	4.0
		40	40			0.6	0.9	1.0	0.7	0.7	0.7	0.6	0.3			5.5	2.0
Common	100	40	40					1.0	1.0	1.3	1.0	1.0	0.4			6.0	3.0
Bermudagrass	34	20	20					0.6	0.6	0.6	0.6	0.4	0.2			3.0	1.5
+Legume <sup>2</sup>		60	60			0.8	1.2	1.0	1.0	1.0	0.8	0.8	0.4			7.0	3.0
		40	40			0.4	0.6	0.5	0.5	0.5	0.4	0.4	0.2			3.5	1.5
Bahiagrass	134	40	40					1.5	1.8	1.7	1.5	1.0	0.8			8.5	4.0
	34	20	20					0.9	1.0	0.9	0.8	0.5	0.4			4.5	2.0
+Legume <sup>2</sup>		60	60			1.0	1.5	1.7	1.5	1.5	1.5	1.0	0.8			10.5	4.0
		40	40			0.6	0.8	0.8	0.7	0.7	0.5	0.5	0.4			5.0	2.0
Dallisgrass	100	40	40					1.1	1.2	1.2	1.1	1.0	0.4			6.0	3.0
	34	20	20					0.6	0.6	0.6	0.6	0.4	0.2			3.0	1.5
+Legume <sup>2</sup>		60	60			1.0	1.2	1.0	1.0	1.0	0.8	0.6	0.4			7.0	3.0
		40	40			0.4	0.6	0.5	0.5	0.5	0.4	0.4	0.2			3.5	1.5
Tall	134	40	40	0.9	0.8	1.1	1.7						1.0	1.0	1.0	7.5	
Fescuegrass	34	20	20	0.4	0.3	0.5	0.8						0.5	0.5	0.5	3.5	
+Legume <sup>2</sup>		60	60	0.9	0.8	1.3	2.0						1.0	1.0	1.0	8.0	
		40	40	0.4	0.4	0.7	1.0						0.5	0.5	0.5	4.0	

This information prepared by NRCS in cooperation with the Mississippi Cooperative Extension Service.

<sup>1</sup>Yields are based on application of essential pasture or hayland management practices with normal rainfall.

<sup>2</sup>Apply nitrogen as needed to maintain proper ratio of grass and legume.

October 1991



U.S. DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE  
JACKSON, MISSISSIPPI

Plan No. \_\_\_\_\_

Date \_\_\_\_\_

PLANNING AID FOR FORAGE, FEED PRODUCTION AND USE

\_\_\_\_\_  
Cooperator

Feed and Forage	Past. or Other Groups No.	Field No.	Acres	Animal Unit Months Grazing (A.U.M.)*												Tot. AUM Graz- ing	Feed		
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Hay Tons	Grain Bu.	Silage Tons
1. Total Forage & Feed Production (AUM)																			
2. AUM Grazing & Feed Needed (From Table on Reverse Side)																	XXX	XXX	XXX
3. Planned Grazing Use (AUM)																	XXX	XXX	XXX
4. Feed Equivalent Needed (AUM)																	XXX	XXX	XXX

\* AUM grazing is the amount of forage required for a 1000 pound cow for one month. One ton of hay is equivalent to 2 AUM grazing. One ton silage is equivalent to 1 AUM grazing. 240 pounds of corn or equivalent equals one AUM grazing.

# LIVESTOCK INFORMATION

Livestock Kind	Number of Animals by Months												
	Number	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Beef Cows													
Calves to Weaning													
Dairy Cows													
and Calves													
Heifers (Replacement)													
Feeder Calves													
Bulls													
Sheep													
Brood Sows													
Feeder Pigs													
Horses and Mules													
Total Number													
Total AUM Grazing Needed*													

\*Record on line 2 on front of this form.

1. An animal unit is equivalent to: 1-1000# cow; 2-500# calves; 1-beef cow and suckling calf; 5-ewes with lambs; 5-sows with litters to weaning age; 20 pigs (50 - 150#); 1-horse or mule.
2. This form is designed for use in assisting district cooperators in planning a system of forage and feed production and use for livestock. A copy should be given to the cooperator and a copy put in the conservation plan folder.
3. Supporting information used for planning a forage and feed production system was developed by NRCS in cooperation with Agronomy Department, Mississippi State University. This information is in Section II of the FOTG.

CONTROLLED-ROTATION GRAZING RECORD AND MANAGEMENT INFORMATION: BASIC MANAGEMENT LEVEL\*

Ranch/  
Farm \_\_\_\_\_ Unit \_\_\_\_\_ Cell \_\_\_\_\_ Year(s) \_\_\_\_\_ Month(s) \_\_\_\_\_ Days \_\_\_\_\_ Page \_\_\_\_\_

Dates:		Julian Day	Paddock Identification:		Stock	Kind or Class	Grazing Cycle No.	Grazing Period Days/Paddock	Recovery Period Days/Paddock	Management Notes
Actual Date or Line No.	Actual Date Write-In		Rotated Into	Rotated Out Of	No.					
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
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25										
26										
27										
28										
29										
30										
31										

\*See notes on back of page for explanation of terms and headings and examples of use.

Form:  
Revised:

## EXPLANATION OF TERMS AND HEADINGS

Introduction: Grazing records and management information provided by grazing records are crucial for upper level management of a grazing cell. Properly kept records provide some of the information useful for management decisions in controlling grazing periods, recovery periods, etc. Records can also provide a production base. That base provides information on production efficiency, possible production growth, and other things. This "basic level" record contains what I consider the bare essential information for record and management purposes. The form is intended for use with one grazing cell and one herd, but it may be used with two or more herds with some special procedures and notations. The form is intended to be used for hand record keeping, but an adequately computer literate person could program it and use the computer to enter the information. There are two other term levels, the "intermediate level" and the "comprehensive level." Those levels can provide more management information than the basic level.

Dates are arranged for "actual" dates or "write-in" dates. Some users prefer to use actual dates as listed on the record form. Therefore, one page is one month. This method usually leaves more space between rotation dates for management notes and it provides at a glance, the length of the grazing periods. Other users prefer to mark out the actual date, write-in the date of each rotation, and use every line. Thus, many rotations, but few management notes, can be entered on one page which may include one month to several months records.

Julian Day is the consecutive day number from 1 to 365 with January 1 being day 1 and December 31 being day 365. Some calendars have built-in Julian day calendars and some computers have continuous longterm Julian day numbers. Weaning age charts can also be used. Or, the user may simply make their own calendar by consecutively numbering the days of the grazing season. This consecutive numbering can go far beyond 365 days to accommodate the lap over of one year into the next. There is no limit. These numbers are used to calculate by subtraction the Grazing Period and Recovery Period days.

Paddock No. or Name Rotated Into or Out Of is the identification of the paddock that stock are going into on a given day, i.e., "1", "B", "9NE", "Blackwater Draw", "Back Side of Hades", "Mosquito Hollow", "West Bluestern-1", etc.

Stock No. & Kind/Class is the number and kind or class of stock in the herd being rotated, i.e. "237", "steers", etc.

Grazing Cycle No. is the consecutive number of grazings a given paddock has had in a given season or year of grazing, i.e., "1", "2", "3", etc.

Grazing Period Days/Paddock is the days a given paddock was grazed in a given paddock was grazed in a given cycle, i.e., "1", "2", "8", etc. It is easily calculated by subtracting the Julian day number (or other number as described above) of the day entering a given paddock from the number of the day leaving the same paddock. Or just simply count the calendar days difference. For example: 127 - 123 = 4.

Recovery Period Days/Paddock is the days a given paddock was not grazed (or otherwise utilized) during the last recovery period, i.e., "14", "26", "97", etc. It is easily calculated by subtracting the Julian day number (or other number as described above) of the day leaving a given paddock during the previous grazing cycle (or other utilization) from the day number of the day entering the paddock of the next grazing cycle. Or, just simply count the calendar days. For example: 137 - 111 = 26.

Management Notes are any notations that may be interesting or pertinent to the grazing cell, paddocks, etc. Notes may include such things as residue heights, rain, trample damage, future needs, weeds, weed utilization, grazing days/acre (No. of Stock x Grazing Period Days + Acres), etc.

Example 1: Using Actual Date

Ranch/

Farm Shady Comfort Unit River Cell Oxbow Year(s) 1993 Month(s) March Days 1-31 Page 1

Dates:		Julian Day	Paddock Identification:		Stock No.	Kind or Class	Grazing Cycle No.	Grazing Period Days/Paddock	Recovery Period Days/Paddock	Management Notes
Actual Date or Line No.	Actual Date Write-In		Rotated Into	Rotated Out Of						
1	-	60	1	B	237	Str.	1	2	?	237 x 2 = 474 Str. days
2	-	61								
3	-	62	9 NE		236	Str.	1	3	?	1 Steer died in bog
4	-	63								Beaver dam broke

Example 2: Using "Write-In" Date

Ranch/

Farm Shady Comfort Unit River Cell Oxbow Year(s) 1993 Month(s) March Days 1-31 Page 1

Dates:		Julian Day	Paddock Identification:		Stock No.	Kind or Class	Grazing Cycle No.	Grazing Period Days/Paddock	Recovery Period Days/Paddock	Management Notes
Actual Date or Line No.	Actual Date Write-In		Rotated Into	Rotated Out Of						
1	3	62	Mos. Holl ow	W. Blue 1	236	Strs.	1	4	?	Weeds galore! Watch it.
2	7	66	Black W. Dr.	Mos. Hollow	236	Strs.	1	2	?	Boggy. Rained 4 "
3	9	68	Back side H	Black W. Dr.	238	Strs.	1	6	?	2 Neighbors Steers
4	15	74	Mos. Hollow	Back Side H	236	Strs.	2	?	12	Took 2 Steers home

## APPENDIX A

### Resource Management Systems (RMS) Quality Criteria for Natural Resource Concerns

Essential practice(s) and requirements for **Non-irrigated Cropland** Resource Management Systems:

- Reduce Sheet and Rill Soil Erosion to “T”. If the soil loss is within (1) ton per acre per year or 125 percent of the soil loss tolerance, whichever is greater, the treatment is considered acceptable. Control ephemeral and classic gullies and streambank erosion. Refer to FOTG Section III-B.
- Conservation Crop Rotation (328).
- Conservation Tillage (329) or Crop Residue Use (344).
- Nutrient Management (590).
- Pest Management (595).

Essential practice(s) and requirements for **Irrigated Cropland** Resource Management Systems:

- Reduce Sheet and Rill Soil Erosion to “T”. If the soil loss is within (1) ton per acre per year or 125 percent of the soil loss tolerance, whichever is greater, the treatment is considered acceptable. Control ephemeral and classic gullies and streambank erosion. Refer to FOTG Section III-B.
- Conservation Crop Rotation (328).
- Conservation Tillage (329) or Crop Residue Use (344).
- Nutrient Management (590).
- Pest Management (595).
- Irrigation Water Management (449).
- Water Quantity criteria are met when planned measures result in achieving an irrigation system efficiency of 60%.

Essential practice(s) and requirements for **Grassland** Resource Management System:

- Reduce Sheet and Rill Soil Erosion to “T”. If the soil loss is within (1) ton per acre per year or 125 percent of the soil loss tolerance, whichever is greater, the treatment is considered acceptable. Control ephemeral and classic gullies and streambank erosion. Refer to FOTG Section III-B.
- Prescribed Grazing (528A).
- Watering Facilities (Pond 378 or Trough or Tank (614).

Essential practice(s) and requirements for **Waste Management**:

- Nutrient management (590).
- All lands on which animal waste can be properly applied must be planned to the RMS level for the appropriate land use.
- Waste must be applied in accordance with a waste utilization plan.

Essential practice(s) and requirements for **Water Quantity**:

- Irrigation Water Management.

## APPENDIX B

### LIVESTOCK-RELATED CONSERVATION PRACTICES

The EQIP policy requires that the conservation plan include the identification of livestock related conservation practices.

The following conservation practices will be identified in the conservation plan as livestock-related (A - Sheep, B - Beef, D - Dairy, H - Horse, P - Poultry, S - Swine or O - Other) regardless of the priority area or statewide resource concern the practices may address.

Practice Code	Name
312	Waste Mgt. System
313	Waste Storage Facility
317	Composting Facility
359	Waste Treatment Lagoon
378	Pond
512	Pasture & Hayland Planting
528A	Prescribed Grazing
561	Heavy Use Area Protection
590	Nutrient Management
614	Trough or Tank
633	Waste Utilization
728	Stream Crossing
769	Incinerator

The following conservation practices may or may not be identified in the conservation plan as livestock-related (A - Sheep, B - Beef, D - Dairy, H - Horse, P - Poultry, S - Swine or O - Other). A designation as (A - Sheep, B - Beef, D - Dairy, H - Horse, P - Poultry, S - Swine or O - Other) will depend on the particular situation and application of the practice.

Practice Code	Name
328	Conservation Crop Rotation
329A	Residue Management - No Till
340	Cover and Green Manure Crop
342	Critical Area Planting
350	Sediment Basin
362	Diversion
386	Field Border
391A	Riparian Forest Buffer
393	Filter Strip
410	Grade Stabilization Structure
412	Grassed Waterway
472	Use Exclusion
585	Stripcropping, Contour
586	Stripcropping, Field
595	Pest Management
638	Water & Sediment Control Basin
720	Pollution Retention Reservoir
734	Vegetative Barrier

The remaining conservation practices eligible for cost-share will not be identified in the conservation plan as livestock-related.

## APPENDIX C

### BUFFER INCENTIVE GUIDELINES

The purpose of the buffer incentives is to encourage the creation of new acres of buffer practices in order to help meet the National Buffer Initiative objectives.

To receive benefit points for CRP practices CP21, CP22, or CP8 the following criteria must be met:

- Enrolled in CRP continuous signup after the EQIP application date
- CRP-2 completed before the ranking period deadline

The CRP practices are ineligible for points if the practices are enrolled in CRP previous to the EQIP application.

The following is further guidance to determine when benefit points apply.

- Applies only to the acreage under the control of the applicant
- Buffer areas already existing are ineligible for points
- In cropland thirty-five (35) feet of trees are already established. Ineligible for points. However if applicant applies for CRP according to the above guidelines and extends the width then the new acreage would be eligible for points.
- In pastureland the riparian area (35 feet minimum) is already established to trees. If the applicant agrees to fence out the area to prevent cows from grazing the riparian area, then bonus points are eligible. Cost share is available for fencing.

Any additional questions should be referred to the area resource conservationist.

**PRACTICE NAME:** Waste Storage Facility

**PRACTICE CODE:** 313

**DEFINITION:** A fabricated structure or impoundment for temporary storage of animal or other organic agricultural wastes.

**PURPOSE:** To temporarily store liquid or solid wastes as part of a pollution control or energy-utilization system to conserve nutrients and energy and to protect the environment.

**WHERE APPLICABLE:** Where waste is generated by agricultural production or processing and storage is necessary to properly manage the waste.

**POLICIES AND PLANNING GUIDELINES:**

1. Components shall not be installed until an overall waste management system has been planned and the owner has complied with all applicable local, state, and federal laws and regulations.
2. Facility shall not be located within a flood plain unless it is protected from inundation or damage by a 25 year frequency flood event and due consideration shall be given to property lines and nearby residences in accordance with state law.
3. The dry litter storage facility shall be permitted by the Department of Environmental Quality, Office of Pollution Control.
4. The Mississippi Board of Animal Health shall approve the freezer unit facility. The facility's size shall be based on one (1) cubic foot of freezer capacity per 1,000 birds.
5. Confined livestock operations of more than 1,000 animal units are defined as large operations and are ineligible for financial assistance. One animal unit equals 1,000 pounds of live weight. The average annual number of livestock in the operation for the 12-month period before making application will be used to determine the number of animal units.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Waste Storage Facility (313) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Waste Storage Facilities for Dry Stacking - A flat rate (FR) payment will be paid for dry stacking facilities on a square foot basis. Cost-sharing will be limited to storage of the annual waste production but not less than 25% of the annual waste production or 180 days of cake production.

Waste Storage Facilities for Freezer Units - A flat rate (FR) will be paid for each freezer unit. The payment will be based on any of the following documented components.

1. An acceptable Protein Recovery Unit (Freezer Unit). The poultry complex who provides maintenance and transportation should recommend freezer unit.



## **Waste Storage Facility (313) Page 2**

2. Components deemed necessary as designed by NRCS for freezer unit construction such as concrete, welded wire fabric, fiber reinforcement, posts, headers, braces, trusses, purlins, roofing, misc. hardware and fasteners.

Waste Storage Facilities for Liquid Wastes - Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork, pipe conduits with appurtenances for waste storage ponds.
2. Concrete, pipe conduits with appurtenances, and reinforcing steel for storage tanks
3. Forming and fabricating concrete solids separator (labor)
4. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Composting Facility

**PRACTICE CODE:** 317

**DEFINITION:** A facility for the biological stabilization of waste organic material.

**PURPOSE:** To treat waste organic material biologically by producing a humus-like material that can be recycled as a soil amendment and fertilizer substitute or otherwise utilized in compliance with all laws, rules, and regulations.

**WHERE APPLICABLE:** When organic waste material is generated by agricultural production or processing and composting is needed to manage the organic waste material.

**POLICIES AND PLANNING GUIDELINES:**

1. Facility shall not be located within a flood plain unless it is protected from inundation or damage by a 25 year frequency flood event and due consideration shall be given to property lines and nearby residences.
2. The facility shall be permitted by Mississippi Board of Animal Health.
3. The poultry operation utilizing the facility shall be included within a waste utilization plan and shall be permitted by Department of Environmental Quality, Office of Pollution Control.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Composting Facility (317) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method.

1. (Establishment of vegetation - see practice code 342).
2. Other components deemed necessary as designed by NRCS for facility construction, such as lumber, concrete, trusses, roofing and fasteners, nails, screws, hinges, etc.

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

1. Concrete not under primary composting bins.
2. Structures which provide addition storage space for the convenience of the landowner.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Residue Management - No-Till and Strip-Till

**PRACTICE CODE:** 329A

**DEFINITION:** Managing the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round, while growing crops in narrow slots or tilled strips in previously untilled soil and residue.

**PURPOSE:** This practice may be applied as part of a conservation management system to reduce soil erosion, maintain or improve soil organic matter, conserve soil moisture, and provide food and escape cover for wildlife.

**WHERE APPLICABLE:** This practice applies to all cropland and other land where crops are grown.

**POLICIES AND PLANNING GUIDELINES:**

1. Surface residues will be uniformly distributed on the soil surface and left undisturbed until planting.
2. Residue will not be burned.
3. Weeds will be controlled by herbicides.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Residue Management - No-Till and Strip-Till code 329A will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment (IP) will be paid based on documented practices and/or components, deemed acceptable by NRCS, such as:

1. Planting
2. Herbicides
3. Fungicides (cotton only)

Separate payment rates are established based on crop type.

**LIFE SPAN:** Annual - not to exceed three years.

**PRACTICE NAME:** Residue Management - Ridge Till

**PRACTICE CODE:** 329C

**DEFINITION:** Managing the amount, orientation, and distribution of crop and other plant residues on the soil year-round, while growing crops on preformed ridges alternated with furrows protected with crop residue.

**PURPOSE:** This practice will be applied as part of a conservation management system to reduce sheet and rill erosion, maintain or improve soil organic matter content and tilth, modify cool wet site conditions, and provide food and escape cover for wildlife.

**WHERE APPLICABLE:** This practice applies to all cropland and other land where crops are grown.

**POLICIES AND PLANNING GUIDELINES:**

1. Surface residue will be uniformly distributed on the soil surface and left undisturbed until planting.
2. Ridge height will be maintained throughout the harvest and winter season by controlling equipment and livestock traffic.
3. Weeds will be controlled by herbicides and cultivation to reform ridges.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Residue Management - Ridge Till code 329C will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment will be paid based on documented practices and/or components, deemed acceptable by NRCS, such as:

1. Planting
2. Ridging
3. Herbicides
4. Fungicides (cotton only)

Separate payment rates are established based on crop types.

**LIFE SPAN:** Annual - not to exceed three years.

**PRACTICE NAME:** Prescribed Burning

**PRACTICE CODE:** 338

**DEFINITION:** Applying fire to predetermined areas under conditions that the intensity and spread of the fire are controlled.

**PURPOSE:** To control undesirable vegetation; prepare sites for planting or seeding; control plant diseases; reduce fire hazards; improve wildfire habitat, forage production, and forage quality; and facilitate distribution of grazing and browsing animals.

**WHERE APPLICABLE:** On woodland, rangeland, native pastures, wildlife areas, or native hay meadows.

**POLICIES AND PLANNING GUIDELINES:** The type of burn will be determined by plant species, size classes, stocking levels, available fuel, moisture conditions, season of year, and burning prescription.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide (FOTG) standard and specifications and planning considerations for Prescribed Burning – 338 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:** Payment will be made based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method upon certification of this practice.

**LIFE SPAN:** 3 years

**PRACTICE NAME:** Cover and Green Manure Crop

**PRACTICE CODE:** 340

**DEFINITION:** A crop of close growing legumes and/or small grain/ryegrass grown primarily for seasonal protection and soil improvement. Usually grown for one year or less.

**PURPOSE:** To control erosion during periods when the major crops do not furnish adequate cover and to add organic matter back to the soil to improve water infiltration, aeration and tilth.

**WHERE APPLICABLE:** On all cropland and other land where crops are grown.

**POLICIES AND PLANNING GUIDELINES:**

1. If the cover and green manure crop is grazed by livestock a minimum height of four (4) inches will be maintained at all times.
2. When cover and green manure crops are plowed under, they will be plowed under at least four (4) weeks before planting the following crop.
3. In no case shall the application of cover and green manure crop result in increased soil erosion as calculated by the RUSLE.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Cover and Green Manure Crop code 340 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate (FR) payment will be paid for the establishment of vegetation. Payment will be based on any of the following documented components:

1. Site Preparation and Planting
2. Seed (separate rates are established for legumes and cereal grains)

**LIFE SPAN:** Annual - not to exceed three (3) years.

**PRACTICE NAME:** Critical Area Stabilization

**PRACTICE CODE:** 342

**DEFINITION:** Planting vegetation such as grasses, grasses and legumes, trees, or shrubs on critically eroding areas.

**PURPOSE:** To stabilize the soil, reduce erosion and damage from sediment and runoff to downstream areas, to improve water quality, to improve wildlife habitat, and to improve visual resources.

**WHERE APPLICABLE:** On highly erodible and critically areas that usually cannot be stabilized by ordinary treatment and management, and if left untreated will cause severe erosion or sediment damage. Critical areas are sites where severe erosion and/or offsite damage is occurring or imminent.

Apply this practice to one of the following:

- Critical areas on farms
  - Gullies
  - Banks
  - Logging trails and roads
  - Field borders
  - Other similar problem areas
- Areas where runoff that carries substantial amounts of sediment, pesticides, herbicides, and fertilizer constitutes a significant pollution hazard.

**POLICIES AND PLANNING GUIDELINES:**

Use on areas where erosion will be significantly reduced thereby reducing the sediment delivery to nearby streams, lakes, ponds, or other water resources.

Consideration shall be given to wildlife habitat and to enhancing the appearance of the area when establishing the protective vegetation.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide (FOTG) standard and specification for Critical Area Stabilization – 342 will be used.

## **Critical Area Stabilization (342) Continued**

### **COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Forestry Site Prep (Light, Medium, and Heavy) – See Practice 490
2. Grading and Shaping - (Applies to smoothing active gullies to facilitate the use of farm equipment for seedbed preparation and planting.)
  - Light (gullies < 2 ft. deep)
  - Medium (gullies 2-4 ft. deep)
  - Heavy (gullies > 4 ft. deep)
3. Establishment of vegetation:
  - Grasses - includes seedbed preparation (planting and smoothing seedbed); seed; fertilizer and lime (soil test rates - not to exceed 2 tons of lime per acre and the equivalent of 600 pounds of 13-13-13 per acre).
  - Trees - includes seeds or seedlings and planting (also see Practice Code 612)
4. Mulching (if needed)

**LIFE SPAN:** An adequate stand of permanent vegetation will be maintained for at least 5 years after the calendar year of establishment.



**PRACTICE NAME:** Sediment Basin

**PRACTICE CODE:** 350

**DEFINITION:** A basin constructed to collect and store debris or sediment.

**PURPOSE:** To preserve the capacity of reservoirs, ditches, canal, diversions, waterways, and streams; to prevent undesirable deposition on bottom lands and developed areas; to trap sediment originating from construction sites; and to reduce or abate pollution by providing basins for deposition and storage of silt, sand, gravel, stone, agricultural wastes, and other detritus.

**WHERE APPLICABLE:** All sites where physical conditions or land ownership preclude treatment of a sediment source by the installation of erosion-control measures to keep soil and other material in place or where a sediment basin offers the most practical solution to the problem.

**POLICIES AND PLANNING GUIDELINES:** Special attention shall be given to maintaining or improving habitat for wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Sediment Basin (350) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe conduit and appurtenances
3. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Well Decommissioning

**PRACTICE CODE:** 351

**DEFINITION:** The sealing and permanent closure of a water well no longer in use.

**PURPOSE:** To prevent entry of foreign substances into the well, eliminate the physical hazard of an open hole to people, animals, and farm machinery; prevent entry of contaminated surface water into well and migration of contaminants into unsaturated zone or saturated zone; and prevent the mixing of chemically or physical different ground waters between separate water bearing zones.

**WHERE APPLICABLE:** Wherever any drilled, dug, driven, bored, or otherwise constructed vertical water well determined to have no further beneficial use.

**POLICIES AND PLANNING GUIDELINES:** All work shall be in compliance with “Mississippi Surface Water and Groundwater Use and Protection Regulations” from the Department of Environmental Quality - Office of Land and Water Resources.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Well Decommissioning (351) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Cement
2. Bentonite
3. Sand
4. Gravel
5. Off-Site Earthfill
6. Equipment/labor with minimum charge

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Waste Treatment Lagoon

**PRACTICE CODE:** 359

**DEFINITION:** An impoundment made by excavation or earthfill for biological treatment of animal or other agricultural waste.

**PURPOSE:** To biologically treat organic waste, reduce pollution and protect the environment.

**WHERE APPLICABLE:** When organic waste material is generated by agricultural production or processing and treatment is needed to manage the organic waste material.

**POLICIES AND PLANNING GUIDELINES:**

1. Facility shall not be located within a flood plain unless it is protected from inundation or damage by a 25 year frequency flood event and due consideration shall be given property lines and nearby residences in accordance with state law.
2. The facility shall be permitted by the Department of Environmental Quality, Office of Pollution Control.
3. The animal operation shall be included within a waste utilization plan.
4. Confined livestock operations of more than 1,000 animal units are defined as large operations and are ineligible for financial assistance. One animal unit equals 1,000 pounds of live weight. The average annual number of livestock in the operation for the 12 -month period before making application will be used to determine the number of animal units.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Waste Treatment Lagoon (359) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:** Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. (Establishment of vegetation - see practice code 342).
3. Pipe conduit and appurtenances
4. Low Pressure Application System includes pump, suction line, check valves, 1000 feet of 3" PVC conveyance line, 300 feet of lay flat hose, strainer, quick connectors, misc. items.
5. Sludge removal - pumping cost per cubic foot. **Does not apply to annual pumpout.**

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Diversion

**PRACTICE CODE:** 362

**DEFINITION:** A channel constructed across the slope with a supporting ridge on the lower side.

**PURPOSE:** To divert excess water from one area for use or safe disposal in other areas.

**WHERE APPLICABLE:** On runoff damages cropland, pastureland, farmsteads, feedlots, urban areas or conservation practices such as terraces, grade stabilization structure or strip cropping and where surface flow and shallow subsurface flow caused by seepage are damaging sloping uplands

**POLICIES AND PLANNING GUIDELINES:**

1. Proper grade and alignment of the diversion shall be as planned and according to current standards and specifications.
2. Diversions shall not be substituted for terraces on a field needing a terrace system for erosion control.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Diversion (362) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

The flat rate (FR) payment will be based on any of the following documented components:

1. Earthwork
2. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Pond

**PRACTICE CODE:** 378

**DEFINITION:** A water impoundment made by constructing a dam or an embankment or by excavating a pit or dugout.

**PURPOSE:** To provide water for livestock, fish and wildlife, recreation, fire control, crop and orchard spraying, and other related uses, and to maintain or improve water quality.

**WHERE APPLICABLE:** All sites where condition allow the design storm to be safely passed through a spillway. Where the drainage area is protected against erosion and maintains a adequate supply of water. Where the reservoir area can be maintained considering evaporation and seepage losses.

**POLICIES AND PLANNING GUIDELINES:**

Special attention shall be given to maintaining or improving habitat for wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Pond (378) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe conduit and appurtenances
3. (Establishment of vegetation - see practice code 342).

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

1. Structures used for commercial production of fish or other wildlife.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Field Border

**PRACTICE CODE:** 386

**DEFINITION:** A strip of perennial vegetation established at the edge of a field.

**PURPOSE:** To control erosion, protect edges of fields that are used for turnrows or travel lanes for farm machinery, reduce competition from adjacent woodland, provide wildlife food and cover, or improve landscape.

**WHERE APPLICABLE:** This practice is applicable to the edges of fields, especially to edges of cropland fields.

**POLICIES AND PLANNING GUIDELINES:**

1. This practice will be established adjacent to cropland, pastureland, woodland, fences, streams, or channels.
2. Consideration will be given to the enhancement of wildlife habitat and the appearance of the area.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Field Border code 386 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate (FR) payment will be paid for the establishment of vegetation. Payment will be based on any of the following documented components:

1. Seed
2. Fertilizer and Lime (Soil Test Rates) – Not to exceed 2 tons of lime/acre and the equivalent of 600 pounds of 13-13-13 per acre.
3. Seedbed preparation, planting and smoothing seedbed

**LIFE SPAN:** Five years.

**PRACTICE NAME:** Riparian Forest Buffer

**PRACTICE CODE:** 391A

**DEFINITION:** An area of trees and/or shrubs located adjacent to and up-gradient from water bodies.

**PURPOSE:** To provide shade to lower water temperature, habitat for wildlife, reduce excess amounts of sediment, organic material, nutrients and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow.

**WHERE APPLICABLE:** On areas adjacent to permanent or intermittent streams, lakes, ponds, or wetlands.

**POLICIES AND PLANNING GUIDELINES:** Planning must take in consideration streambank erosion and existing vegetation in the riparian zone. The riparian buffer must be inspected periodically and protected to maintain the intended purpose.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specifications and planning considerations for Riparian Forest Buffer - 391 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:** Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Forestry Site Prep (Light, Medium, and Heavy) - If needed (also, see Practice 490)
2. Establishment of vegetation:
  - Grasses - includes seedbed preparation (planting and smoothing seedbed); seed; fertilizer and lime (soil test rates - not to exceed 2 tons of lime per acre and the equivalent of 600 pounds of 13-13-13 per acre).
  - Trees - includes seeds or seedlings and planting (also see Practice Code 612)
3. Grading and Shaping - Applies only to areas needing smoothing of active gullies to protect areas with concentrated flows.
  - Light (gullies < 2 ft. deep)
  - Medium (gullies 2-4 ft. deep)
  - Heavy (gullies > 4 ft. deep)
4. Non-electric fencing - as deemed necessary by NRCS

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Filter Strip

**PRACTICE CODE:** 393

**DEFINITION:** A strip or area of vegetation for removing sediment, organic matter and other pollutants from runoff and wastewater.

**PURPOSE:** To remove sediment and other pollutants from runoff or wastewater.

**WHERE APPLICABLE:** On cropland at the lower edge of fields or above conservation practices; in areas requiring filter strips as part of a waste management system; or on forestland where filter strips are needed to reduce delivery of sediment.

**POLICIES AND PLANNING GUIDELINES:**

1. This practice should be applied in conjunction with other needed conservation practices.
2. Minimum grass heights will be maintained at all times.
3. Concentrated flow will not be permitted. All concentrated flow areas must be repaired to facilitate sheet flow.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Filter Strip code 393 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate (FR) payment will be paid for the establishment of vegetation. Payment will be based on any of the following documented components:

1. Seed
2. Fertilizer and Lime (Soil Test Rates) - Not to exceed 2 tons of lime/acre and the equivalent of 600 pounds of 13-13-13 per acre.
3. Seedbed preparation, planting and smoothing seedbed

**LIFE SPAN:** Five years.



**PRACTICE NAME:** Firebreak

**PRACTICE CODE:** 394

**DEFINITION:** A strip of bare land or fire-retarding vegetation.

**PURPOSE:** To protect soil, water, and plant resources by reducing or preventing damage from fire.

**WHERE APPLICABLE:** On areas where damaging fires are likely or where fire may be prescribed as a cultural or protective measure.

**POLICIES AND PLANNING GUIDELINES:** Plan on areas that must be protected from wildfires.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide (FOTG) standard and specifications and planning considerations for Firebreak – 394 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

The flat rate (FR) payment will be based on any of the following documented components deemed necessary by NRCS:

1. Disking
2. Bushhogging
3. Water bars
4. Critical area stabilization (see practice 342)

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Grade Stabilization Structure

**PRACTICE CODE:** 410

**DEFINITION:** A structure used to control the grade and head cutting in natural or artificial channels.

**PURPOSE:** To stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advance of gullies, and to enhance environmental quality and reduce pollution hazards.

**WHERE APPLICABLE:** In areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion.

**POLICIES AND PLANNING GUIDELINES:**

Special attention shall be given to maintaining or improving habitat for fish and wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Grade Stabilization Structure (410) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe Conduit
3. Concrete
4. Required Appurtenances; i.e., bands, antiseep collars, drainfill, and antivortex.
5. Clearing and Grubbing – as needed
6. Installation of concrete structures (labor) – if needed
7. Installation of CMP structures (labor) – if needed
8. Installation of pipe (labor) – if needed
9. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Grassed Waterway

**PRACTICE CODE:** 412

**DEFINITION:** A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff.

**PURPOSE:** To convey runoff from terraces, diversions, or other water concentrations without causing erosion or flooding and to improve water quality.

**WHERE APPLICABLE:** All sites where added capacity, vegetation protection, or both are required to control erosion resulting from concentrated runoff and where such control can be achieved by using this practice alone or combined with other conservation practices.

**POLICIES AND PLANNING GUIDELINES:**

Special attention shall be given to maintaining or improving habitat for wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Grassed Waterway (412) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Irrigation Water Conveyance, Pipeline, Underground

**PRACTICE CODE:** 430

**DEFINITION:** A pipeline and appurtenances installed in an irrigation system.

**PURPOSE:** To prevent erosion or losses of water quality or damage to the land, to make possible proper management of irrigation water, and to reduce water conveyance losses.

**WHERE APPLICABLE:** All pipelines have been planned and located to serve as an integral part of an irrigation water distribution or conveyance system designed to facilitate the conservation use and management of the soil and water resources.

Water supplies, water quality, and rates of irrigation delivery for the area served by the pipelines shall be sufficient to make irrigation practical for the crops to be grown and the irrigation water application method to be used.

Pipelines installed according to this standard shall be placed only in suitable soils where the bedding and backfill requirements can be fully met.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost-share is authorized for lands currently under irrigation i.e. supplemental irrigation water was applied by the existing irrigation system according to crop needs during the past growing seasons.
2. Cost-share is authorized for installation of pipeline and components for a permanent system.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Irrigation Water Conveyance Pipeline, Underground (430) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method for any components deemed necessary by NRCS, such as:

1. Pipe, metal and plastic
2. Appurtenances i.e. thrust blocks, stands, air vents, pressure valves, couplers, check valves, alfalfa valves, tees, and elbows.

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

1. Pipelines serving newly planned irrigation systems. This practice is not to be used to bring new irrigation systems into operation thereby increasing demands on the surface and ground water resources.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Irrigation Storage Reservoir

**PRACTICE CODE:** 436

**DEFINITION:** A irrigation water storage structure made by constructing a dam.

**PURPOSE:** To conserve water by holding it in storage until it can be beneficially used to meet crop irrigation requirements.

**WHERE APPLICABLE:** The water supply available to the irrigated area is insufficient to meet conservation irrigation requirements during part or all the conservation season. Water is available for storage from surface runoff, streamflow, or a subsurface source during periods of low or nonirrigation use. Topographic, geologic, and soils conditions are satisfactory at some suitable site for constructing an economically feasible storage reservoir.

**POLICIES AND PLANNING GUIDELINES:**

Cost-share is authorized for lands currently under irrigation; i.e., supplemental irrigation water was applied by the existing irrigation system according to crop needs during the past growing seasons.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Irrigation Storage Reservoir (436) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. (Establishment of vegetation - see practice code 342).

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

Newly planned irrigation systems. This practice is not to be used to bring new irrigation systems into operation thereby increasing demands on the surface and ground water resources.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Irrigation System, Tailwater Recovery

**PRACTICE CODE:** 447

**DEFINITION:** A facility to collect, store, and transport irrigation tailwater for reuse in a farm irrigation distribution system.

**PURPOSE:** To conserve farm irrigation water supplies and water quality by collecting the water that runs off the field surface for reuse on the farm.

**WHERE APPLICABLE:** On sloping lands that are served by a properly designed and installed surface irrigation system to facilitate the conservation use of soil and water resources. They also suitable for use in areas where recoverable irrigation runoff flows or can be anticipated under the management practices used or expected to be used.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost-share is authorized for lands currently under irrigation; i.e., supplemental irrigation water was applied by the existing irrigation system according to crop needs during the past growing seasons.
2. State permit is required before cost-share is authorized.
3. Cost-share is authorized when the pumping plant (refer to Practice Standard 533) is considered permanent or dedicated to one purpose and one farming operation.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Irrigation System, Tailwater Recovery (447) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate (FR) will be paid for planned "gallons per minute". The payment will be based on any of the following documented components, (also see Practice Code 533).

1. Steel pipe
2. Pump and appurtenances
3. Propeller
4. Gear head
5. Float operated or electrode actuated switch

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe conduit and appurtenances
3. (Establishment of vegetation - see practice code 342).

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:** Newly planned irrigation systems. This practice is not to be used to bring new irrigation systems into operation thereby increasing demands on the surface and ground water resources.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Irrigation Water Management

**PRACTICE CODE:** 449

**DEFINITION:** Determining and controlling the rate, amount, and timing of irrigation water in a planned and efficient manner.

**PURPOSE:** To effectively use available irrigation water supply in managing and controlling the moisture environment of crops to promote the desired crop response, to minimize soil erosion and loss of plant nutrients, to control undesirable water loss, and to protect water quality.

**WHERE APPLICABLE:** All areas that are suitable for irrigation and that have a water supply of suitable quality and quantity. An adapted conservation irrigation system must be available, either a portable system or a system that is established on the land to be irrigated. The irrigator shall have a knowledge and capability to manage and apply irrigation water in such a manner that the objectives are obtained.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost-share is authorized for lands currently under irrigation; i.e., supplemental irrigation water was applied by the existing irrigation system according to crop needs during the past growing seasons.
2. Management procedures are documented using the “Check-book” method of tracking irrigation needs. Managers will be required to submit records which support effective use of irrigation water.
3. Soil moisture shall be monitored throughout the growing season and recorded by an approved method and based on sound technology.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Irrigation Water Management (449) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment (IP) will be made for documented management practices as recurring payments for no more than 3 years.

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

Newly planned irrigation systems. This practice is not to be used to bring new irrigation systems into operation thereby increasing demands on the surface and ground water resources.

**LIFE SPAN:** 1 year

**PRACTICE NAME:** Forest Site Preparation

**PRACTICE CODE:** 490

**DEFINITION:** Treating areas to encourage natural seeding of desirable trees or to permit reforestation by planting or direct seeding.

**PURPOSE:** To prepare land for establishing a stand of trees to conserve soil and water, to improve watersheds, or to produce wood crops.

**WHERE APPLICABLE:** In understocked areas or in areas of undesired vegetation where the soils are suited to growing trees for wood crops.

**POLICIES AND PLANNING GUIDELINES:** Site preparation prepares the site for optimum seed germination and early survival of seedlings. Site preparation may be done by prescribed burning, chemical application, drum chopping, disking, or a combination of these practices.

**SPECIFICAIONS:** The NRCS Field Office Technical Guide (FOTG) standard and specifications and planning considerations for Forest Site Preparation – 490 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented practices and/or components deemed necessary by NRCS will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Light Site Preparation – bushhogging, disking, opening field ripping 15”-18” or light chemical application, etc.
2. Medium Site Preparation -- medium mechanical such as drum chopping or medium chemical application, etc.
3. Heavy Site Preparation – heavy mechanical such as shearing and windrow or heavy chemical application, etc.

**LIFE SPAN:** 1 year



**PRACTICE NAME:** Pasture and Hayland Planting

**PRACTICE CODE:** 512

**DEFINITION:** Establishing and reestablishing native or introduced forage species.

**PURPOSE:** This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

1. Establish adapted and compatible species, varieties, or cultivars.
2. Improve or maintain livestock nutrition and/or health.
3. Extend the length of the grazing season.
4. Provide emergency forage production.
5. Reduce soil erosion by wind and/or water.

**WHERE APPLICABLE:** This practice may be applied on cropland, hayland, pastureland, and other agricultural lands where forage production is feasible and desired.

**CRITERIA:**

General criteria applicable to all the purposes stated above.

Plant species and their cultivars shall be selected based upon:

1. Climatic conditions, such as annual rainfall, seasonal rainfall patterns, growing season length, humidity levels, temperature extremes and the USDA plant hardiness zones.
2. Soil condition and position attributes such as pH, available water holding capacity, aspect, drainage class, inherent fertility, salinity and alkalinity, flooding and ponding, and levels of toxic elements that may be present such as selenium and aluminum.
3. Plant resistance to disease and insects common to the site or location.
4. Plant compatibility with other forage species and their selected cultivar(s) in rate of establishment, maturity, and growth habit when seeded together as a forage mixture.

Specified seeding/plant material rates, methods of planting and date of planting shall be consistent with documented guidance cited by research institutions or agency demonstration trails for achieving satisfactory establishment. Seeding rates will be calculated on a pure live seed (PLS) basis or percent germination.

Provide a firm, weed-free seedbed that ensures seed will contact soil moisture uniformly, facilitates seedling emergence, and provides a medium that does not restrict or allow roots to become dry.

All seed and planting materials shall be labeled and meet state seed quality laws.

## Pasture and Hayland Planting (512) Continued

### **POLICIES AND PLANNING GUIDELINES:**

1. Specification for the establishment of pasture and hay plantings shall be prepared for each site or management unit.
2. Consideration shall be given to forage species that are capable of meeting the desired level of nutrition for the kind and class of the livestock to be fed.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Pasture and Hay Planting code 512 will be used.

### **COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate payment will be made for pasture and hay planting. Payments will be based on any of the following documented components NRCS deems necessary:

1. Seed (separate rates are established based on grass species and species mixtures)
2. Fertilizer including application fees
3. Lime including application fees
4. Seedbed preparation, planting and smoothing seedbed

**For establishment:** Fertilizer and lime will be applied according to soil test recommendation not to exceed one ton of lime/acre and the equivalent of 400 pounds of 13-13-13 fertilizer/acre.

**LIFE SPAN:** An adequate stand of permanent pasture and hay will be maintained for at least five years after the calendar year of establishment.

Practice 512 (Pasture and Hayland Planting) IS NOT ELIGIBLE for establishing grass on timberland that has been cutover. The purpose for this practice under EQIP is to establish cover for erosion control and forage production on open land (pasture or cropland). If the field(s) for which the funds are requested for pasture planting was in trees in 1990, this field is NOT ELIGIBLE for cost-share for grass establishment under EQIP. If the field was converted from woods to crops or pasture after December 23, 1985, and before January 1, 1990, was kept in compliance with the sodbuster soil loss requirements, this field(s) may be eligible for cost-share for grass plantings through EQIP.

Ownership at the time of the clear cut operation is not a factor in determining eligibility. Pasture planting can be used to convert cropland to grass and improve current grass but CANNOT be used to convert timberland (cutover) to grass.

**PRACTICE NAME:** Prescribed Grazing

**PRACTICE CODE:** 528A

**DEFINITION:** The controlled harvest of vegetation with grazing or browsing animals, managed with the intent to achieve a specified objective.

**PURPOSE:** This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

1. Improve and maintain the health of the desired plant community.
2. Provide or maintain food, cover and shelter for animals of concern.
3. Improve or maintain animal health and productivity.
4. Maintain or improve water quality and quantity.
5. Reduce accelerated soil erosion and maintain or improve soil condition for sustainability of the resource.

**WHERE APPLICABLE:** This practice may be applied on all lands where grazing and/or browsing animals are managed.

**CRITERIA:**

1. General criteria applicable for all the purposes stated above.
2. Removal of herbage will be in accordance with production limitation, plant sensitivities and management goals using Sections I and II of the FOTG and other references as guidance.
3. Application of this practice will prescribe the rest period, intensity, frequency, duration and season of grazing to promote ecologically and economically stable plant communities that meet client and resource objectives.

**POLICIES AND PLANNING GUIDELINES:**

1. This practice will be planned and applied by site specific recommendations. Needed documentation includes utilization heights, rest periods, grazing period, grazing sequences, key grazing plants and area.
2. Consideration shall be given to wildlife habitat improvement and/or Wildlife Upland Habitat Management as an objective.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Prescribed Grazing code 528A will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment (IP) will be made for documented management practices on a per-acre basis. (Limited to three years.) The rate to be paid will be based on whether cross fencing is not planned or cross fencing is planned and must be installed.

**LIFE SPAN:** Not to exceed one year

**PRACTICE NAME:** Pumping Plant for Water Control

**PRACTICE CODE:** 533

**DEFINITION:** A pumping facility installed to transfer water for a conservation need, including removing excess surface or ground water; filling ponds, ditches or wetlands; or pumping from wells, ponds, streams, and other sources.

**PURPOSE:** To provide a dependable water source or disposal facility for water management on wetlands or to provide water supply for such purposes as irrigation, recreation, livestock, or wildlife.

**WHERE APPLICABLE:** Wherever water must be pumped to accomplish a conservation objective. It is especially applicable for maintaining critical water levels in existing swamps, marshes, or open water and for providing water sources for newly constructed wetlands and ponds.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost-share is authorized for lands currently under irrigation; i.e., supplemental irrigation water was applied by the existing irrigation system according to crop needs during the past growing seasons.
2. State permit is required before cost-share is authorized.
3. Cost-share is authorized when the pumping plant is considered permanent or dedicated to one purpose and one farming operation.
4. The pumping plant must be able to provide water in quality and quantity to make irrigation practical for the crops to be grown and also must be adequate for the water application methods to be used.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Pumping Plant For Water Control (533) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate (FR) will be paid for planned “gallons per minute”. The payment will be based on any of the following documented components.

1. Steel Pipe
2. Pump and Appurtenances
3. Gear Head
4. Propeller
5. Float operated or electrode actuated switch

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

Newly planned irrigation systems. This practice is not to be used to bring new irrigation systems into operation thereby increasing demands on the surface and ground water resources.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Irrigation Regulating Reservoir

**PRACTICE CODE:** 552B

**DEFINITION:** A small storage reservoir constructed to regulate or store a supply of water for irrigation.

**PURPOSE:** To store water for relatively short periods of time to provide suitable irrigation streams, provide for improved management of irrigation water, and provide storage for reuse irrigation systems.

**WHERE APPLICABLE:** The existing available irrigation stream is of such size that regulation is necessary to accomplish the intended purposes. An adequate and dependable volume of good quality water is or can be made available. Topographic, geologic and soil conditions are suitable for the construction of the reservoir. The contributing drainage area can be protected against erosion so that normal sedimentation does not shorten the planned life of the reservoir.

**POLICIES AND PLANNING GUIDELINES:**

Cost-share is authorized for lands currently under irrigation; i.e., supplemental irrigation water was applied by the existing irrigation system according to crop needs during the past growing seasons.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Irrigation Regulating Reservoir (552B) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. (Establishment of vegetation - see practice code 342).

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

Newly planned irrigation systems. This practice is not to be used to bring new irrigation systems into operation thereby increasing demands on the surface and ground water resources.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Heavy Use Area Protection

**PRACTICE CODE:** 561

**DEFINITION:** Protecting heavily used area by establishing vegetative cover, by surfacing with suitable materials, or by installing needed structures.

**PURPOSE:** To stabilize urban, recreation, or facility area frequently and intensely used by people, animals, or vehicles.

**WHERE APPLICABLE:** On urban and recreation area or other frequently and intensely used areas that require special treatment to protect them from erosion or other deterioration.

**POLICIES AND PLANNING GUIDELINES:**

Plans and specifications for heavy use area protection shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Heavy Use Area Protection code 561 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

A flat rate payment will be made for heavy use area protection on a square foot basis. The payment will be based on any of the following documented components deemed necessary by NRCS:

1. Earthwork
2. Gravel
3. Geotextile
4. Concrete

**LIFE SPAN:** Five years after the calendar year of establishment.

**PRACTICE NAME:** Stripcropping, Contour

**PRACTICE CODE:** 585

**DEFINITION:** Growing crops in a systematic arrangement of strips on the contour. The strips are arranged so that a strip of grass or close growing crop is alternated with a strip of clean tilled crop.

**PURPOSE:** The purpose of this practice is to reduce sheet and rill erosion.

**WHERE APPLICABLE:** This practice is applicable to sloping cropland and other land where crops are grown where the topography is uniform enough to permit tillage, planting, and harvesting operations to be done on the contour.

**POLICIES AND PLANNING GUIDELINES:**

1. This practice should be applied in conjunction with water disposal systems, residue management systems, or other needed conservation practices.
2. A specific conservation crop rotation should be planned for this system.
3. When the row grade deviation exceeds the limits, correction strips will be used.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Stripcropping, Contour code 585 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment (IP) will be paid for documented management practices based on affected crop acres.

**LIFE SPAN:** 1 year

**PRACTICE NAME:** Stripcropping, Field

**PRACTICE CODE:** 586

**DEFINITION:** Growing crops in a systematic arrangement of strips across the general slope (not contoured) to reduce soil erosion.

**PURPOSE:** To help control sheet and rill erosion on sloping cropland where contour stripcropping is not practical.

**WHERE APPLICABLE:** This practice is applicable to sloping cropland and other sloping land where crops are grown.

**POLICIES AND PLANNING GUIDELINES:**

1. This practice will only be used where contour stripcropping is not practical due to irregular topography.
2. This practice will be used in conjunction with water disposal practices when needed.
3. Maximum density and height of vegetation must be maintained to trap sediment.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Stripcropping, Field code 586 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment (IP) will be paid for documented management practices based on affected crop acres.

A flat rate (FR) will be paid on establishment of vegetative strips. Payments will be based on any of the following documented components deemed necessary by NRCS:

1. Seed
2. Fertilizer and Lime (Soil Test Rates) – Not to exceed 2 tons of lime/acre and 600 pounds of 13-13-13 per acre.
3. Seedbed preparation, planting and smoothing seedbed

**LIFE SPAN:** Five years.



**PRACTICE NAME:** Structure for Water Control

**PRACTICE CODE:** 587

**DEFINITION:** A structure in an irrigation, drainage, or other water management system that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation.

**PURPOSE:** To control the stage, discharge, distribution, delivery, or direction of flow of water in open channels or water use areas. Also used for water quality control, such as sediment reduction or temperature regulation. These structures are also used to protect fish and wildlife and other natural resources.

**WHERE APPLICABLE:** Wherever a permanent structure is needed as an integral part of an irrigation, drainage, or other water-control systems 1) to conduct water from one elevation to a lower elevation, 2) to control the direction of channel flow resulting from high water or backflow from flooding, 3) to control the level of a water table and 4) to control the level of water used to maintain flood irrigation.

**POLICIES AND PLANNING GUIDELINES:**

Special attention shall be given to maintaining or improving habitat for fish and wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Structure for Water Control (587) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe conduit and appurtenances
3. Concrete
4. Installation of concrete structure (labor)
5. Clearing and grubbing
6. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Nutrient Management

**PRACTICE CODE:** 590

**DEFINITION:** To supply plant nutrients for optimum forage and crop yields, minimize edge-of-field delivery of nutrients to surface waters and limit leaching of nutrients from the root zone to ground water. Nutrient management should maintain or improve the physical, chemical, and biological condition of the soil resource.

**WHERE APPLICABLE:** On all types of forages and crops where nutrients are applied.

**POLICIES AND PLANNING GUIDELINES:** Nutrient management should include the application of nutrients at rates necessary to achieve realistic forage and crop yields, improve the timing of applications, and the use of agronomic forage and crop production technology to increase nutrient use efficiency. At a minimum, nutrient management should involve manure and sludge analysis, nutrient credits, and routine soil testing.

**SPECIFICATIONS:** The NRCS Field Office Technology Guide (FOTG) standard, specifications, and planning considerations for Nutrient Management - 590 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Manure lab analysis
2. Sludge lab analysis

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

1. Soil testing

**LIFE SPAN:** Nutrient management shall be an annual practice.

**PRACTICE NAME:** Pest Management

**PRACTICE CODE:** 595

**DEFINITION:** Managing agricultural pest infestations (including weeds, insects, and diseases) to reduce adverse effects on plant growth, crop production, and environmental resources.

**PURPOSE:** To protect quantity and quality of agricultural commodities.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost share is authorized only for chemical weed control on pasture or hay lands.
2. All herbicide label instructions must be followed.
3. Grazing or haying restrictions must be followed.
4. Sprayers must be calibrated before application of herbicide.
5. If herbicides are applied in an "identified vulnerable area", determine potential pesticide loss to surface run off and leaching.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Pest Management (595) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment (IP) will be paid based on documented application of components, deemed acceptable by NRCS, such as:

1. Herbicides
2. Surfactants
3. Application (spray & tractor)

**LIFE SPAN:** Pest Management is an annual practice

**PRACTICE NAME:** Terrace

**PRACTICE CODE:** 600

**DEFINITION:** An earth embankment, a channel, or a combination ridge and channel constructed across the slope.

**PURPOSE:** To reduce slope length, erosion, and sediment content in runoff water; to improve water quality; intercept and conduct surface runoff at a nonerosive velocity to a stable outlet; retain runoff for moisture conservation; prevent gully development; reform the land surface, improve farmability, or reduce flooding.

**WHERE APPLICABLE:** All sites where water erosion is a problem and there is a need to conserve water. The soils, topography, and outlet are adequate.

**POLICIES AND PLANNING GUIDELINES:** Special attention shall be given to maintaining or improving habitat for wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Terrace (600) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

**Gradient Terraces** - A flat rate (FR) payment will be paid for gradient terraces based on broad base or narrow base construction.

**PTO (storage) Terraces** –

A flat rate (FR) payment will be paid based on broad base or narrow base construction.

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Pipe conduit
2. Appurtenances
3. Light grading and shaping
4. (Establishment of vegetation - see practice code 342).
5. Earthwork

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

1. Maintenance of present terrace system.
2. Converting the present terrace system solely because of changes in farming equipment or cropping patterns.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Tree & Shrub Establishment

**PRACTICE CODE:** 612

**DEFINITION:** To set tree seedling or cutting in the soil.

**PURPOSE:** To reestablish or reinforce a stand of trees to conserve soil moisture, beautify an area, protect a watershed, or produce wood crops.

**WHERE APPLICABLE:** In open fields, in understocked woodland, beneath less desirable tree species, or in other areas suitable for producing wood crops; where erosion control or watershed protection is needed; and where greater natural beauty is wanted.

**POLICIES AND PLANNING GUIDELINES:** Trees should be planted within their native ranges and on preferred or optimum sites. Planting or seeding must be done during dormant weather conditions – generally between December 1 through March 31 in Mississippi. Seed or seedlings must be stored and protected from heat and freezing before and during planting. Recommended spacing in the NRCS Field Office Technical Guide (FOTG) must be adhered to at all times. Proper planting guidelines should be followed and protective measures taken after planting is completed to protect young trees from wildfire and harmful grazing.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specifications, and planning considerations for Tree Establishment – 612 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

The flat rate (FR) payment will be based on any of the following documented components:

1. Tree planting (includes seedlings and planting)
2. Direct Seeding (includes seeds and planting)

Payment rates will be based on species composition.

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Trough or Tank

**PRACTICE CODE:** 614

**DEFINITION:** A trough or tank, with needed devices for water control and waste water disposal, installed to provide drinking water for livestock.

**PURPOSE:** To provide watering facilities for livestock at selected locations that will protect vegetative cover through proper distribution of grazing or through better grassland management for erosion control. Another purpose on some sites is to reduce or eliminate the need for livestock to be in streams, which reduces livestock waste there.

**WHERE APPLICABLE:** This practice applies where there is a need for new or improved watering places to permit the desired level of grassland management, to reduce health hazards for livestock, and to reduce livestock waste in streams.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost-sharing is authorized only where installation of pipeline and components for a permanent system.
2. Special attention shall be given to maintaining or improving habitat for fish and wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Trough or Tank (614) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payments will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method for any of the following documented components deemed necessary by NRCS.

1. Site preparation – light grading and shaping (as needed, also see Practice 342)
2. Gravel for pad
3. Trough or Tank
4. Float control devices
5. Pump System - Ram or Solar (eligible only when cattle are restricted from stream due to installation of Riparian Forest Buffers, Practice Code 391)
6. Pipe – cost-share is limited to a maximum of 1000 feet of 1-inch pipe per trough or tank

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Waste Utilization

**PRACTICE CODE:** 633

**DEFINITION:** Using agricultural waste or other waste on land in an environmentally acceptable manner while maintaining or improving soil and plant resources.

**PURPOSE:** To safely use wastes to provide fertility for crop, forage, or fiber production and to improve or maintain soil structure and to safeguard water resources.

**WHERE APPLICABLE:** On soils and vegetation suitable for the use of waste as a fertilizer.

**POLICIES AND PLANNING GUIDELINES:**

1. Municipal and Industrial wastes require special considerations and are ineligible for financial assistance. Technical assistance is limited to inventory and evaluation.
2. Application of waste shall be limited to either nitrogen or phosphorus whichever is determined to be the limiting nutrient.
3. Calculations showing application rates for pasture verses hayland shall distinguish between the two conditions in accordance with current standards.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Waste Utilization (633) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

An incentive payment will be paid on a per acre basis. Cost-share is eligible for recurring payments for no more than 3 years.

**LIFE SPAN:** 1 year

**PRACTICE NAME:** Water and Sediment Control Basin

**PRACTICE CODE:** 638

**DEFINITION:** An earth embankment or a combination ridge and channel generally constructed across the slope and minor watercourses to form a sediment trap and water detention basin.

**PURPOSE:** To improve farmability of sloping land, reduce water course and gully erosion, trap sediment, reduce and manage onsite and downstream runoff, and improve downstream water quality.

**WHERE APPLICABLE:** Wherever the topography is generally irregular, the watercourse and gully erosion is a problem. Sheet and rill erosion is controlled by other conservation practices. Runoff and sediment damage land and improvements. Adequate outlets are available or can be provided.

**POLICIES AND PLANNING GUIDELINES:**

Special attention shall be given to maintaining or improving habitat for wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Water and Sediment Control Basin (638) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe and appurtenances
3. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years



**PRACTICE NAME:** Forest Harvesting Trails and Landings

**PRACTICE CODE:** 655

**DEFINITION:** Application of one or more erosion control measures on forest land. Erosion control systems include the use of conservation plants, cultural practices, and erosion control structures on disturbed forest land for the control of sheet and rill erosion, gully formation, and mass soil movement.

**PURPOSE:** To protect the resource base by reducing erosion and sedimentation and by protecting and improving water quality on forest land disturbed by silvicultural or other activities.

**WHERE APPLICABLE:** Applies to untreated disturbed forest land areas including logging roads, skid trails, and loading areas; buffer or filter strips; slash disposal areas; site preparation; and burned and overgrazed areas.

**POLICIES AND PLANNING GUIDELINES:** An effective harvesting contract, logging supervision, and frequent site inspections are the first steps involved in protecting soil and site resources from excessive damage associated with harvesting practices. Post-harvesting practices will include grading, shaping, smoothing, water bars, ripping, and disking for seedbed preparation. Landowner or authorized agent should suspend logging when conditions are too wet to log. All logging debris and slash will be removed from perennial streams. Stream management zones or filter strips will be designated and protected. Restoration of designated or existing primary roads and stream crossings to original grade and condition including the necessary provisions for drainage.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide (FOTG) standard and specifications and planning considerations for Forest Stand Improvement – 655 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components deemed necessary by NRCS, will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method

1. Critical area stabilization (see Practice 342)
2. Road stabilization
3. Water bars

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Agrichemical Mixing Center (Interim)

**PRACTICE CODE:** 702

**DEFINITION:** An environmentally safe structure and wash pad for the collecting and retaining of chemicals used during filling, mixing, or rinsing activities.

**PURPOSE:** To provide a center where chemicals (pesticides and fertilizers) can be properly handled without harmful effects to the environment.

**WHERE APPLICABLE:** In areas where the lack of adequate facilities to mix chemical creates significant potential for pollution of surface and/or ground water. In areas where a water supply is adequate for filling spray equipment, rinsing equipment and containers. In areas where soils and topography are suitable for construction of a center. In areas where the practice is in compliance with Federal, State, and local laws, rules, and regulations.

**POLICIES AND PLANNING GUIDELINES:**

1. Cost-sharing is authorized only where construction and use will improve the quality of water runoff from the center into surface or ground water supplies.
2. The center will be located as far as practical from streams, lakes, wetlands, ponds, or wells but no closer than 100 feet.
3. Location shall be above the 100 year flood plain elevation.
4. Cost-sharing shall be available for stationary sites only and is based on the size of the concrete pad.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Agrichemical Mixing Center (702) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

The flat rate (FR) will be made on a square foot basis upon documentation of any of the following components:

1. Concrete
2. Steel
3. Post – wood or metal
4. Trusses – standard design
5. Sheetmetal Roofing
6. Rinsate Storage Tanks
7. Sump Pump
8. Pipe Conduit and Appurtenances
9. Gravel

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Pollution Retention Reservoir (Interim)

**PRACTICE CODE:** 720

**DEFINITION:** A water impoundment reservoir with controlled water release to trap and store nonpoint source pollutants from agricultural lands.

**PURPOSE:** To maintain or improve downstream water quality by providing an environmentally safe reservoir for deposition and storage of agricultural nonpoint source pollutants.

**WHERE APPLICABLE:** All sites where normal runoff from agricultural lands poses a potential impairment to downstream water quality; where construction is practical and economical; where topographic, geologic, and soil condition at the proposed site are satisfactory for development, construction, and any needed soil sealing to prevent subsurface pollution migration; and where soil erosion in the contributing watershed has been reduced to acceptable levels through installation of appropriate conservation measures.

**POLICIES AND PLANNING GUIDELINES:** Special attention shall be given to maintaining or improving habitat for wildlife where applicable.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide (FOTG) standard and specification for Sediment Basin (720) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe conduit and appurtenances
3. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** 10 years

**PRACTICE NAME:** Stream Crossing (Interim)

**PRACTICE CODE:** 728

**DEFINITION:** A travelway constructed across a stream to allow livestock or equipment to cross with minimal disturbance to the stream ecosystem.

**PURPOSE:** To prevent or minimize water degradation from sediment, nutrient and organic loading. To protect the water course from degradation and adverse hydrological impacts. To protect the land from streambank erosion. To provide a means for animals to cross a water course.

**WHERE APPLICABLE:** This practice applies to all land uses where an intermittent or perennial water course exists and crossing must be made by livestock.

**POLICIES AND PLANNING GUIDELINES:**

Plans and specifications for stream crossings shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Interim Stream Crossing code 728 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method:

1. Earthwork
2. Pipe conduit and appurtenances
3. Fencing, non-electric
4. Rock riprap
5. Concrete
6. Geotextile
7. Clearing and grubbing
8. Reinforcing steel
9. (Establishment of vegetation - see practice code 342).

**LIFE SPAN:** Not to exceed ten years.

**PRACTICE NAME:** Vegetative Barrier

**PRACTICE CODE:** 601

**DEFINITION:** Narrow, permanent strips of stiff, erect, dense perennial vegetation established along the contour of slopes or established only across concentrated flow areas.

**PURPOSE:** The purpose of this practice is to reduce sheet and rill erosion and/or reduce ephemeral erosion; facilitate benching of topography; entrap sediment and soluble contaminants to facilitate their transformation.

**WHERE APPLICABLE:** This practice is applicable to cropland or other land where crops are grown. It is not applicable to pastureland or hayland.

**POLICIES AND PLANNING GUIDELINES:**

1. This practice should be applied in conjunction with other needed conservation practices.
2. Vegetative barriers will be installed according to designed grade.
3. All tillage, planting, and harvesting operations will be parallel to the vegetative barrier.
4. Caution will be used when applying post-emergence grass herbicides or burndown herbicides.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide standard and specification for Vegetative Barrier practice code 601 will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

1. Incentive Payment (IP) - One-time payment will be paid for documented management practices of affected crop acres.
2. Flat rate (FR) payment of establishment of vegetative barriers. Payment rates will be based on the width of the vegetated strip. Components eligible for payment may include:
  - Seed
  - Fertilizer and Lime (Soil Test Rates) – Not to exceed 2 tons of lime/acre and 600 pounds 13-13-13 per acre
  - Seedbed Preparation
  - Planting
3. Flat rate payment for installation of tile drain as deemed needed by NRCS.

**LIFE SPAN:**

- Incentive Payment - not to exceed one year
- Vegetative Barrier - five years
- Tile Drain – ten years

**PRACTICE NAME:** Incinerator

**PRACTICE CODE:** 769

**DEFINITION:** An incinerator used to dispose of dead poultry, suckling pigs, or other small animals.

**PURPOSE:** To provide a suitable disposal method of dead poultry or small animals to prevent pollution and improve environmental quality.

**WHERE APPLICABLE:** When organic waste material is generated by agricultural production or processing and incineration is needed to manage the organic waste material.

**POLICIES AND PLANNING GUIDELINES:**

1. The incinerator shall be located with due consideration being given to property lines and nearby residences.
2. The incinerator shall be approved and permitted by the Mississippi Department of Environmental Quality, Office of Pollution Control (MDEQ-OPC). All federal, state, and local laws, rules, and regulations governing waste management, pollution abatement, and health and safety shall be adhered to.
3. The incinerator capacity using no more than two incineration cycles shall exceed the average daily weight of dead animals anticipated.

**SPECIFICATIONS:** The NRCS Field Office Technical Guide interim conservation practice standard and specification for Incinerator (769) will be used.

**COMPONENTS ELIGIBLE FOR COST-SHARE:**

Payment for the following documented components will be based on the percent of actual cost not to exceed a specified maximum (AM) cost-share method.

1. An incinerator approved for use by MDEQ-OPC.
2. Components deemed necessary as designed by NRCS for incinerator construction, such as concrete, welded wire fabric, metal trusses, metal roofing and purlins.

**COMPONENTS NOT ELIGIBLE FOR COST-SHARE:**

1. Concrete and roofing which provides addition storage space for the convenience of the landowner.
2. Existing incinerators are not eligible for cost share.

**LIFE SPAN:** 10 years

## **Instructions for Necessary Addition to Cost List**

The FY 2002 Mississippi EQIP Eligible Practice Cost List and the NRCS Mississippi FY 2002 Average Cost List for Pipe, Appurtenances and Other Components are included in the Mississippi EQIP Manual - FY 2002 Program Year. These cost are to be used to assist in ranking applications and estimating total cost of eligible practice for cost-share for EQIP.

In the event it becomes necessary to include components that are not included on the cost list the following procedure should be used:

1. The District Conservationist should contact two or more vendors for prices of the needed component.
2. Fax the prices along with a description of the component to:  
Agricultural Economist  
Attn: Glynda Clardy  
Fax no. 601-965-4430
3. If additional information is needed please contact,  
Glynda Clardy  
Agricultural Economist  
Ph. 601-965-4139 ext. 240

A component code and an approved average cost will then be established for the needed component. All field offices will be notified of the addition to the cost list.

## EQIP DUE DATES FOR FY2002

<b>DATE</b>	<b>ACTIVITY</b>
October 1, 2001	Signup begins. Applications due to FSA with 5 days of receipt. FSA will provide weekly to NRCS report EEB710-ROO1 for application evaluation.
February 8, 2002	Last day to receive applications for ranking.
February 15, 2002	FSA sends to NRCS the final application report to complete application evaluations.
March 29, 2002	Last day for applicant to sign 1201.
April 5, 2002	NRCS field office transmits ranking report to area office and provides local FSA office with a sorted summary for each state concern and/or priority area.
April 12, 2002	NRCS area office transmits area ranking report to state office.
April 19, 2002	NRCS state office in concurrence with FSA determines approved applications and notifies COC.
May 3, 2002	COC reviews final ranking and selects applications for plan and contract development and notifies NRCS DC.
June 1, 2002	FY 2003 proposals due in state office.
July 12, 2002	NRCS Completes conservation plans for COC approval.
August 9, 2002	COC approves contracts.
August 30, 2002	FSA Completes entry of contracts into system.